

# Canine Semen Banking: sanitary and ethical aspects. Legislation<sup>1</sup>

Banco de semen canino: aspectos sanitários e éticos. Legislação

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#### Abstract

International canine semen exchanges have increased very much during the past 5 to 10 years. These exchanges require sanitary controls, as some bacterial and viral diseases may be transmitted by the semen. Furthermore, the ethical, legislative and administrative aspects of canine semen banking and canine semen exchanges are very different among countries. This makes the practice of semen exchanges quite complicated for veterinarians.

**Keywords**: semen, sanitary, ethical.

### Introduction

Ruling a canine semen bank in Europe is not an easy matter ... sanitarily and administratively speaking. There are many different things which veterinarians willing to involve themselves in this activity have to think about. This article tries to summarize all the details that have to be known when dealing with semen banking. A very complete review of the regulation has been written by Catharina Linde-Forsberg and is available on www.ivis.org.

## Sanitary aspects

Some diseases may be transmitted through the use of frozen semen. This is why the regulations usually ask for checking the sanitary status of stud dogs, especially towards specific diseases.

# Canine Brucellosis

According to Wanke (2004), if Canine Brucellosis is especially common in the southern states of the United States, Central and South America, it has also been reported in many countries in the world. In Europe, it is suggested that this diseases may exist on an enzootic scale. Males excrete bacteria in their semen, this is why the sanitary status towards this disease is highly important in semen banking.

Antibodies against *Brucella canis* can be detected at 2 weeks post-infection. However, no serological method is completely accurate before 12 weeks post-infection (Zoha and Carmichael, 1982). There are five serological diagnostic methods currently used nowadays, however they vary in sensitivity and specificity: rapid-slide agglutination test, tube agglutination test, Agar gel immunodiffusion, ELISA tests, indirect immunofluorescence. No commercial ELISA tests are available.

When exchanging dog semen between countries, surprisingly, sanitary regulations concerning Canine Brucellosis vary greatly: some countries ask for a B.canis test prior to the semen collection (ie: France), others at the time of semen collection, others around the time of semen collection (ie: Sweden) and others after the semen collection (ie: New Caledonia). Some countries have no regulation concerning this disease (ie: USA).

# Canine Herpes virus

To our knowledge, no specific studies have been done about the transmission of CHV through the semen. The most specific test would be to search for the virus by PCR, when available. However, it is not done routinely in canine semen banking.

## Other diseases

Some countries may ask for Leptospirosis, Aujesky's disease, or Rabies. In some breeds, it may be useful to check the serological status towards Bovine Brucellosis. In order to transmit the urethral flora to the female when practicing AI, some authors recommend to clean the prepuce of the dog before semen collection.

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Stud dogs may also be checked from prostatitis, which may be infectious. Levy *et al.* (2006) have demonstrated that when the prostatic parenchyma is normal under ultrasound examination, we can be sure that the dog does not suffer from prostatitis.

Some "silly" additional sanitary requirements are sometimes asked: *i.e.* the eggs used in the freezing medium have to be free from Newcastle disease, dry shippers have to be unused/sterilised (how?) or sealed, dogs have to have been resident inside the country of exportation during the prior 6 to 12 months, etc...

Avoiding transmission of diseases in practice

When using reusable collecting devices (plastic or rubber collecting cones...), we recommended to clean them thoroughly with bactericidal detergents, and then to rinse them three times with tap water and three times with distilled water before letting them dry. Sterilisation may be practiced using ultra-violet lamps.

Most freezing media contain wide-broad antibiotics.

When exchanging semen, inside or outside a country, a veterinary health certificate should always be provided.

A special attention may also be raised on the potential danger of transmitting diseases when practicing AIs. When using Scandinavian intra-uterine diseases, the plastic speculums, more or less porous, may be difficult to sterilise. The best way would probably be to autoclave them, but most veterinary clinic do not have this possibility. Ultra-violet lamps may be used. Otherwise veterinarians may replace these plastic devices with metallic devices. When practicing endoscopic AIs, endoscopes have to be sterilised before being re-used on the following bitch. "Cold sterilising" techniques are available (ie: Cidex® (Johnson and Johnson inc. www.vapr.com/home.jhtml?loc=BEFRE&page=viewContent&contentId=09008b9880c35d20&parentId=09008b9880c35d20, Anios® (www.bhymedical.com)...).

# **Ethical aspects**

Is semen banking legal?

Some countries do not admit canine AI or canine semen banking. Sometimes only AIs using frozen semen are forbidden.

Some restrictions of the use of frozen semen may be applied if:

- the dog is dead;
- the dog belongs to an official "dangerous breed";
- the dog has not proved to be able to mate naturally;
- the semen has to be inseminated using a surgical AI.

What are the purposes of using frozen semen?

Ethical considerations may be raised about the aims of the use of frozen semen in the dog. Ethically acceptable roles may be found, for example:

- when using frozen semen to help to save the genetic potential of endangered breeds
- when using frozen semen to save the genetic potential of working dogs (guide dogs for blind people for example)
- when freezing semen before using a medical treatment (chemotherapy against cancer, anti-androgenic drugs...) in a diseased dog.

Commercial and financial purposes only are more questionable, but in no way unethical. Insemination of frozen canine semen to wolves is unethical.

Identification of donor dogs.

All the dogs undergoing semen freezing in a semen bank should be checked for their identity (tattoo, microchip, nose print). DNA finger-printing may be considered, and, in our point of view, should be done systematically.

Ethical procedures

Semen banking should only be proposed to dog owners if the veterinarian is skilled in freezing dog semen and if the freezing procedure has been proved to be a good one.

On a similar scale, veterinarians practicing AIs with frozen semen should be skilled in determining the



optimal period of insemination.

Veterinarians practicing semen banking should be aware that there should be an insurance against any problem (destruction of the nitrogen tank...) while keeping the semen in the semen bank.

When exchanging semen between veterinarians, preliminary contacts, in order to make every details clear, should be organised, by phone or preferably by Email.

Only good quality semen after thawing should be send to other countries (> 50% post-thaw motility after thawing ?).

Another question is: how much semen should be sent? It is ethical, in our point of view, to send enough semen to perform two AIs on the same bitch during the same heat period.  $150 \times 10^{-6}$  million sperm x 2 AIs, whatever the breed, seems reasonable.

# Exchanges of semen

In this respect, many different aspects have to be taken into consideration:

- who may run a canine semen bank?
- who is the owner of the semen
- how are the semen straws/vials marked?
- how are the semen transported (dry-shipper or liquid nitrogen tank).

The EVSSAR is in the process of creating a network of European vets involved in canine and feline Artificial Insemination and semen banking.

#### References

**Levy X, Maurey C, Fontaine E**, *et al.* Comparative evaluation of five different techniques to diagnose prostatic infection in the dog. *In*: European Veterinary Society of Small Animal Reproduction, Budapest, Hungary. *Proceedings* ... Budapest: SP/EVSSAR, 2006. p.319. Abstract.

Wanke MM. Canine Brucellosis. Anim Reprod Sci, v. 82/83, p.195-207, 2004.

**Zoha SJ, Carmichael LE**. Serological responses of dogs to cell wall and internal antigens of Brucella canis (B. canis). *Vet Microbiol.*, v.7, p.35-50, 1982.

# Annexes

- The European Veterinary Society for Small Animal Reproduction. Project: creating a network of veterinarians able to practice dog (and cat) A.I. all over Europe. Disponível: <a href="https://www.evssar.org">www.evssar.org</a>
- **Linde-Forsberg, C.** Regulations and recommendations for international shipment of chilled and frozen canine semen. *In*: Concannon PW, England G, Verstegen J, Linde-Forsberg C. Recent advances in small animal reproduction. New York: IVIS, 2001. Disponível: <a href="https://www.ivis.org">www.ivis.org</a>.
- Veterinary health certificate for export of dog semen.
- Certificat sanitaire pour l'importation et le transit sur le territoire métropolitain et dans les départements d'outre mer des semences canines en provenance des pays tiers.



# The European Veterinary Society for Small Animal Reproduction (www.evssar.org)

# PROJECT:

# CREATING A NETWORK OF VETERINARIANS ABLE TO PRACTICE DOG (AND CAT) A.I. ALL OVER EUROPE

# 1. AIMS:

Helping veterinarians and breeders to find a veterinary surgeon able to practice AI in good conditions and with reasonnably good results :

- in case of a breeder travelling far away to mate his/her bitch in any european country, if the mating does not occur correctly and that a progesterone test or an Al is urgently needed;
- when a breeder wants to import chilled/frozen semen from a dog living abroad or when a vet wants to coordonate such an exchange.

The secondary aims followed by this project are:

- to promote the exchanges of dog semen among Europe in good sanitary and technical conditions;
- to locate where the « skilled » vets are and who they are ;
- to promote the role of vets in getting good results with AI and to avoid breeders doing it themselves;
- to promote EVSSAR as a coordinator and an educating association in the field of small animals AI in Europe.

# 2. HOW TO PROCEED ?

# 2.1. Promoting the network :

EVSSAR shall try to contact as many europeans vets, that may be interested to enter this network, as possible, and ask them if they are interested in entering the network:

- by informing that this project is going on, by publishing it in the Newsletter and in National Veterinary Journals and in the EVSSAR website; by informing people in the EVSSAR congresses and meetings,
- by E mailing to our national representatives and all our members, asking them if they know who we could contact in their own countries and how;



 by trying to get the lists of the members of each national group of vets specialised in Small Animal Reproduction (when it exists) – like GERPAC, GERES ... - or ask the veterinary faculties who organise training courses in AI to give the names and addresses (post or Email) of the vets who have followed such courses.

# 2.2. Knowing better who are these vets:

Once the vets are willing to enter the network, EVSSAR could do two different things.

# 2.2.1. Sending a very detailed questionnary to all of them, that includes questions like:

- how many bitches do you receive per year to check the ovulation period?
- how many progesterone tests do you order per year ?
- do you use quantitative progesterone assays (which ones?, vet or human laboratory?...) or semi-quantitative tests (which ones)?
- are you confident in collecting dog semen and separating sperm fractions?
- do you know how to perform sperm analysis?
- how many Als do you perform in bitches per year? (fresh, chilled and frozen semen)
- what are your results?
- which technique are you using?
- do you perform intra-uterine Als ? With which technique ?
- do you have a microscope with a heating plate?
- do you perform ultrasonography? Your probes are: 5 MHz? 7;5 MHz?>8 MHz?
- do you have an endoscope suitable for vaginoscopy?
- are you able to centrifuge blood or sperm ?
- do you have a gaz anesthestic machine?
- is liquid nitrogen easily available for you?
- are you able to electro-ejaculate cats?
- have you performed Ais in cats?
- etc....

# 2.2.2. Asking them to answer, with details, several clinical cases related with checking the ovulation time with accuracy, preparing dog semen or performing AI:

These clinical cases will test not only the theoretical knowledge of these vets, but also their clinical experience in this field (the questions should be written by people performing many Als and have a good practical experience of it).

An examination committee should be apointed by the EVSSAR members to do this job.

# 2.3. Publishing the names of the vets that are considered as « skilled » enough.

# 2.3.1. Vets accepted to enter the list.



Veterinarians that will be considered as « skilled » enough will have their names published in a list that will only appear in the EVSSAR website (in order not to counteract with national rules of veterinary syndicates or official veterinary regulations or organisms).

According to their technical equipment or clinical experience, different categories could be listed (this has to be discussed further...): vets who can perform progesterone assays only, those who perform vaginal Als only, intra-uterine Als, only fresh semen Als, chilled semen Als, etc...

# 2.3.2. Vets who are not considered as skilled enough to enter the list.

These vets should be encouraged to follow national or european training courses and apply again for the network later. It should be one of the roles of EVSSAR to help them improve their clinical ability.

# 2.4. Re-evaluating the vets inside the list at regular intervals.

The clinical ability of the vets inside the list should be tested every 3 or 4 years in order to note:

- if they have moved,
- if they are able to practice new techniques that they did not practice before ?,
- if they have improved their results,
- if they up to date their kowledge in the field of Al? etc...





In: Recent Advances in Small Animal Reproduction, P. W. Concannon, G. England, J. Verstegen and C. Linde-Forsberg (Eds.)

Publisher: International Veterinary Information Service (www.ivis.org), Ithaca, New York, USA.

Regulations and Recommendations for International Shipment of Chilled and Frozen Canine Semen (22-May-2001)

# C. Linde-Forsberg

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# Appendix 1

#### A Quick Guide to Regulations for International Shipment of Chilled and Frozen Canine Semen

In parallel with the growing interest in international shipment of canine semen there is a growing demand for a resource providing a quick reference to the varying rules and regulations that apply in different countries. This guide, although far from being complete, aims at summarizing much of this information and lists useful websites and addresses for the relevant national organizations. It is important to remember that the rules and regulations as they appear in this appendix have been substantially abbreviated, and that they may be changed at any time. Always check for the latest official versions. Please note that when it is stated that there are no rules or special requirements, this can imply either that everything is allowed, or that nothing is allowed.

#### Some Useful Addresses

The addresses and information for a large number of Kennel Clubs world-wide can be found on the website of the Fédération Cynologique Internationale, FCI. Website:www.fci.be

#### Australia (category 4+)

Australian Quarantine and Inspection Service (AQIS) Phone: +61 93115315; Fax: +61 94552325.

Australian National Kennel Council (ANKC) P.O.box 1005, St. Marys, New South Wales 2760, Australia. Phone: +61 2 98 34 40 40; Fax: +61 2 98 34 60 38; E-mail:dogsaust@ozemail.com.au Website:www.ankc.aust.com

Requirements: An import permit is required. The semen shipment must be accompanied by the import permit in original. Each permit is valid for 6 months, and for one consignment only. The liquid nitrogen container must be new/unused. A veterinary health certificate is required. A blood test for *Brucella canis* taken within 45 days before the semen collection and the dog not be naturally mated between sampling and the last semen collection. A blood test for leptospirosis taken within 21 days prior to semen collection, or if the dog is vaccinated against leptospira two blood tests should be taken with an interval of at least 14 days and the second being within 21 days prior to semen collection, with a titre of not more than 1:400 on each occasion and no increase in titre between the first and second tests.

# Austria (category 4)

Federal Ministry for Social Security and Generations (Bundesministerium für Soziale Sicherheit und Generationen), Veterinärvervaltung, Radetskystrasse 2, A-1030 Vienna. Phone: +43.17.11.00; Fax: +43.17.10.41.51. Website:www.bmsg.gv.at Austrian Kennel Club (Österreichischer Kynologenverband, ÖKV), Johann-Teufel-gasse 8, a-1230 Vienna. Phone: +43.18.88.70.92; Fax: +43.18.88.26.21; E-mail:office@oekv.at; Website:www.oekv.at

Requirements: An import permit, a health certificate and a blood test for leptospirosis and *Brucella canis*. For frozen semen the health certificate and the Brucella test should be made at the time of semen collection and repeated after 14 days.

# Belgium (category 1)

The Belgian Ministry of Agriculture (Ministère de l'Agriculture), Service de l'Inspection Vétérinaire, Avenue du Boulevard 21 (Sème étage), 1210 Bruxelles, Belgium. Website:www.cmlag.fgov.be/

The Belgian Kennel Club (Union Royale Cynologique Saint Hubert), 98, Avenue Albert Giraudlaan, B-1030 Bruxelles, Belgium. Phone: +32 22.45.48.40; Fax: +32 22.45.87.90

Requirements: None.



#### Canada (category 3+)

Canadian Food Inspection Agency (CFIA), P.O. Box 6088, 1081 Main Street, Mencton, N.B. E1C 8R2, Phone: +1 506 851 7652; Fax: +1 506 851 2689

Canadian Kennel Club (CKC), 100-89 Skyway Avenue, Etobicoke, Ontario M9W 6R4, Canada.

Requirements: An import permit and a veterinary health certificate. The permit in original should accompany the semen shipment to Canada. An export certificate should be issued by a Government veterinarian of the exporting country. The LN<sub>3</sub>-tank must have a numbered tamper proof seal, and the number must be recorded on the export certificate. The dog must not have been vaccinated during the 30 days immediately preceding collection. The dog must not have been used for natural service for a minimum of 14 days prior to and until completion of semen collections. The semen sample(s) must be certified free from contaminating pathogenic microorganisms. All equipment used to collect, handle, wash, freeze and store the semen must have been new, or sterilized prior to use. Specified antibiotics must have been used in the extenders, and the semen have been stored in this for specified times, depending on which antibiotics were used, before freezing. The shipment of the semen through another country requires written authorization from CFIA.

#### Czech Republic (category 4+)

Czecz Republic State Veterinarian (Státni Veterinární Správa Ceské Republiky), Tesnov 17, 117 05 Praha 1, Czecz Republic. Phone: +420 248.012.735; Fax: +420 218.129.74

The Czecz Kennel Club (Ceskomoravská Myslivecká Unie), U Pergamenky 3, CZ-170 00 Praha 7, Czecz Republic. Phone: +420 2.667.108.29; Fax: +420 2.667.128.27; E-mail:cmku@cmku.cz; Website:www.cmku.cz

Requirements: An import permit, a veterinary health certificate and a blood test for leptospirosis and *Brucella canis*, taken not earlier than 20 days and not later than 30 days after the collection of semen. Semen straws should be sealed at the time of collection and marked with details of the donor dog. The donor dog should be vaccinated against rabies.

#### Denmark (category 3+)

The Danish Veterinary and Food Administration, (Ministeriet for Fodevarer, Landbrug og Fiskeri), Morkhoj Bygade 19, DK 2860 Soborg, Denmark. Website:www.foedevaredirektoratet.dk/vnyt, E-mail:foedevaredirektoratet@fdir.dk, Phone: +45 33.95.60.00, Fax: +45 33.95.62.89

The Danish Kennel Club (Dansk Kennel Klub), Parkvej 1, Jersie Strand, DK-2680 Solrod Strand, Denmark. Phone: +45 56.18.81.00; Fax: +45 53.18.81.91, Website:www.dansk kennel klub.dk

Requirements: The importer needs to apply for a registration as importer in writing to the "Veterinaerdirektoratet, 1. Afdeling, Rolighedsvej 25, 1958 Frederiksberg C, Denmark" at least 5 days before the import, stating the country of origin of the semen. The import permit will thereafter be sent out together with the relevant regulations and veterinary forms. A veterinary health certificate is required. For semen from rabies countries the dog must also be vaccinated against rabies at least 30 days and not more than 12 months before the collection of semen. The Kennel Club has no rules for litters by chilled imported semen.

Frozen semen to be imported must have been collected by a veterinarian, who also issues a health certificate, and states that the dog has normal testicles. The dog must be ID-tattooed or micro chipped. The semen should be frozen in straws, which must be clearly marked. A special certificate is necessary for registration of the litter, and can be ordered from the KC.

### Finland (category 1)

The Finnish Ministry of Agriculture and Forestry (Jord- och skogsbruksministeriet), P.O. Box 30, 00023 Valtioneuvosto, Street address: Kluuvikatu 4A, Helsinki, Finland. Phone: +358 9-1601;+358 9-1602432; Fax: +358 9-1603338; E-mail:outi.tyni@mmm.fi; Website:www.mmm.fi

<u>The Finnish Kennel Club</u> (Suomen Kennelliitto-Finska Kennelklubben r.y.) Kamreerintie 8, FI 02770 Espoo, Finland. Website:www.kennelliitto.fi, Phone: +358 9.887.300; Fax: +358 9.8873.0331.

Requirements: None.

## France (categories 1 and 2)

The French Ministry of Agriculture (Direction Générale de l'Alimentation, Mission de Coordination Sanitaire Internationale), Rue de Vaugirard, 75732 Paris Cedex 15, France. Phone: +33 - 1.49.55.84.84; Fax: +33 - 1.49.55.83.14. Website:www.agriculture.gouv.fr The French Kennel Club (Société Centrale Canine de France) 155, Avenue Jean Jaurès, F-93535 Aubervilliers Cedex, France. Phone: +33 1.49.37.54.00: Fax: +33 1.49.37.01.20. Website:www.scc.asso.fr

Requirements: There are no requirements from the ministry for dog semen from EU-countries. Semen from non-EU-countries needs an import permit from: Service des Titres du Commerce Extérieur 8, Rue de la Tour des Dames, 75436 Paris Cedex 09, France. Fax: +33 1.55.07.46.59. The French Kennel Club registers litters provided that the insemination is performed by a veterinarian who has followed a special course at one of the veterinary schools in Lyon, Maisons-Alfort or Nantes. Imported semen must be kept in an official dog semen bank before being sent to the inseminating veterinarian. Banks are located in the 3 veterinary schools mentioned above.



#### Germany (category 1)

The German Ministry of Agriculture (Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft) Referat 327 Rochusstr. 1, D-53123 Bonn, Germany. Phone: +49 22.85.290, Fax: +49 22.85.29.44.01, E-mail:327@bml.bund.de. Referatsleiter: Dr. Valder (Tel +49 228 529 3618).

<u>The German Kennel Club</u> (Verband für das Deutsche Hundewesen, VDH), Westfalendamm 174, Postfach 10 41 54, D-44041 Dortmund, Germany. Phone: +49 231.565.000; Fax: +49 231.592.440. Website:www.vdh.de. The relevant Breed Club should also be contacted, as some of them have their own regulations.

<u>Requirements</u>: None.

### Hungary (category 1)

The Hungarian Board of Agriculture (Földmûvelésügyi és Vidékfejlesztési Minisztérium) H-1860 Budapest 55.Pf.1, Hungary. Phone: +361 301.4000; Fax: +361 302.0408; E-mail:miniszter@f-m.x400gw.itb.hu

The Hungarian Kennel Club (Magyar Ebtenyésztok Országos Egyesülete, MEOE) H-1116 Budapest, Tétényi út 128/b-130. Phone: +361 208.2300

Requirements: None. The Kennel Club does not officially accept litters by AI, however, there is no control.

#### Italy (category 1)

The Italian Ministry of Agriculture, Phone: +39 06.599.438.23, E-mail:dav.u10@sanita.it; Website:www.politicheagricole.it The Italian Kennel Club (Ente Nazionale della Cinofilia Italiana, ENCI) Viale Corsica 20, 20137 Milano, Italy. Phone: +39 02.70.020.341; Fax: +39 02.70.202.321; E-mail:mond2000.enci@enci.it; Website:www.enci.it Requirements: None specified/officially not allowed, but no control.

#### The Netherlands (category 1)

The Dutch Ministry of Agriculture, Nature Management and Fisheries The Dutch Kennel Club (Rad van Beheer op Kynologish Gebeid in Nederland), Postbus 75901, 1070 AX, Amsterdam Z, The Netherlans. Phone: +31 20 664 4471; Fax: +31 20 671 0846; Website:www.minlnv.nl

<u>The Dutch Kennel Club</u> (Rad van Beheer), Website:www.kennelclub.nl <u>Requirements</u>: None.

#### New Zealand (categories 3+ and 4+)

The Ministry of Agriculture and Forestry P.O. Box 2526, Wellington, New Zealand.

Website:www.maf.govt.nz/AnimallHS/countries3-5html

The New Zealand Kennel Club, The New Zealand Kennel Club, Prosser Street, Eldsor, Private bag 50903, Porirus, New Zealand. Phone:+64 4 237 4498; Fax: +64 4 237 0721; Email:nzkc@nzkc.org.nz; Website:www.nzk.org.nz Requirements:

- From Australia: An import permit, a Zoo-sanitary certificate and a veterinary health certificate. Semen should have been
  collected in the presence of a veterinarian. The ampoules, straws or pellets containing the semen must be sealed following
  collection, identified with the details of the donor dog, securely packed in a new/unused container using coolant which has not
  been used for any other purpose, and been stored under veterinary supervision until the time of export.
- From The United Kingdom and The Republic of Ireland: An import permit. The original permit should accompany the consignment to New Zealand. A veterinary health certificate issued immediately before, and again between 3 6 weeks after the collection of the semen. A blood test for leptospirosis within 6 weeks before semen collection. A blood test for Brucella canis between 3 6 weeks after collection of the semen. The donor dog must have been resident in the country for at least 2 months prior to the semen collection. Identification of the dog and straws etc as above. The country of export must have been free from rabies for at least 12 months, and the donor dog must not have been vaccinated against rabies with a live vaccine during the 6 months preceding collection of the semen.
- From Hawaii, Norway and Sweden: An import permit. The original permit should accompany the consignment to New Zealand. A health certificate issued immediately before, and again between 3 6 weeks after collection of the semen. A blood test for Brucella canis taken during 14 days prior to semen collection. The donor dog must have been resident in the country for at least 2 months prior to the semen collection. The semen must be held frozen for at least 21 days after collection and a new veterinary certificate be made stating that the donor dog is still healthy. Identification of dog and straws etc as above. The country of export must have been free from rabies for at least 12 months, and the donor dog must not have been vaccinated against rabies with a live vaccine during the 6 months preceding collection of the semen.
- From Canada and The United States: As above with the following additions: The donor dog must not during the 6 months prior
  to semen collection have been on any property on which rabies has been diagnosed in the previous 12 months. The dog should
  be vaccinated against rabies with an inactivated cell culture origin vaccine, and the vaccination programme be completed not
  more than 12 months and not less than 30 days prior to semen collection. A blood test for Brucella canis within 3 6 weeks



after semen collection. A blood test for leptospirosis within 3 - 6 weeks after semen collection, or two tests not less than 30 days apart with no rise in titre between tests and treatment with specified antibiotics during the 30 days prior to semen collection.

#### Norway (categories 1, 3+ and 4+)

The Norwegian Ministry of Animal Health (Statens Dyrehelsetilsyn) Postboks 8147 Dep., N-0033 Oslo, Norway. Phone: +47 22.24.19.40; Fax: +47 22.24.10.45; Website:www.dyrehelstilsynet.no

The Norwegian Kennel Club (Norsk Kennel Klub, NKK) Pb 163 Bryn, 0611 Oslo, Norway. Phone: +47 21 600 900. Website:www.nkk.no

Requirements: No restrictions apply to semen from Sweden. From EU/EFTA countries: An import permit. A veterinary health certificate issued on a standard form accepted by the Ministry. The dog must be ID-tattooed or microchipped and this number appear on all certificates. The dog must be vaccinated against leptospirosis and rabies (unless from a rabies free country) within 365 days prior to semen collection. For dog semen from outside of EU/EFTA in addition: a blood test for Brucella canis within 21 days prior to semen collection, and the dog must not have mated naturally in the period between the blood sampling and the semen collection. Bitches inseminated with the imported semen must not mate with another dog in the same oestrus period. Should an abortion occur the Ministry must be immediately notified.

#### Spain (category 1)

The Spanish Ministry of Agriculture, Paseo Infanta Isabel 1, 280 14 Madrid, Spain. Phone: +34 91.347.5185; Fax: +34 91.347.5761; Website:www.mapya.es/indices/pags/info/index.htm

The Spanish Kennel Club (Real Sociedad Central de Fomento de Razas Caninas en España), Lagasca 16, Bajo derecha, 28001 Madrid, Spain. Phone: +34 91 426 49 60; Fax: +34 91.435.11.13 / +34 91.435.28.95. Website:www.rsce.es Requirements: Zoosanitary certificate. Health certificate. The Spanish Kennel Club is currently working on their rules.

#### Republic of South Africa (category 4)

National Department of Agriculture (Department van Landbou), Directorate of Animal Health, Import-Export Control, Private Bag X138, Pretoria, 0001, Republic of South Africa. Phone: +27 012.319.75.14; Fax: +27 012.329.82.92.

Kennel Union of Southern Africa, P.O. Box 2659, Cape Town 8000, South Africa. Phone: +27 21.23.90.27; Fax: +27 21.23.58.76.

Kennel Union of Southern Africa, P.O. Box 2659, Cape Town 8000, South Africa. Phone: +27 21.23.90.27; Fax: +27 21.23.58.76.

Requirements: An import permit. The original permit should accompany the semen shipment. The permit is valid for 6 months and for one consignment only. A veterinary health certificate. A blood test for *Brucella canis* taken at the time of semen collection.

#### Sweden (category 4)

Swedish Board of Agriculture (Statens Jordbruksverk), SE 551 82 Jönköping, Sweden. Phone: +46 36 15 50 00; Fax: +46 36 15 50 05; Website:www.sjv.se

Swedish Kennel Club, SE 163 85 Spånga, Sweden. Phone: +46 8.795.30.00; Fax: +46 8.795.30.40; Website:www.skk.se; Requirements: An import permit, which is valid for 12 months. A veterinary health certificate issued not more than 15 days before shipment. Blood tests for leptospira canicola and ichterohaemorrhagica, and Brucella canis, to be marked with the identity of the dog. For fresh semen the blood sample must not be taken more than 15 days before semen collection and shipment; for frozen semen it should be taken not earlier than 20 days or later than 30 days after semen collection and freezing (i.e. during a 10-day-span). The Kennel Club requires that the identity of the dog is certified by the veterinarian collecting the semen. If the dog is not microchipped or ID-tattooed either a photograph of the dog should be signed by its owner and by the veterinarian collecting the semen, or a nose print is taken and signed as the photo. Photo or nose print should accompany the shipment of semen.

# Switzerland (category 2)

<u>Federal Veterinary Office</u> (Bundesamt für Veterinärwesen), Schwarzenburgstrasse 161, CH-3003 Bern, Switzerland. Website:www.bvet.admin.ch. Phone: + 31-323.85.24/09; Fax: +31-323.85.22.

Swiss Kennel Club (Schweizerischen Kynologischen Gesellschaft), Postfach 8276, 3001 Bern, Switzerland. Phone: +31 306.62.62; Fax: +31 306.62.60, E-mail:skg@hundeweb.org, Website:www.dogweb.org
Requirements: Just a formal import permit.

# United Kingdom/Great Britain (category 3+)

Ministry for Agriculture, Fisheries and Food (MAFF), 1A Page Street, London, SW1P 4PQ, United Kingdom.

Website:www.maff.gov.uk, E-mail:germplasmimports@ahvg.maff.gov.uk or, E-mail:germplasmexports@ahvg.maff.gov.uk, both Fax: +44 20.7904.6395.

The Kennel Club, Clarges street, London. Website:www.the-kennel-club-org.uk

Requirements: An import permit, which is valid for 8 months. From rabies free countries: Country disease clearance. A veterinary health certificate. The donor dog must have been resident in the country for the last 12 months and not been vaccinated against rabies



with a live vaccine during the 6 months prior to semen collection. The semen must not be despatched until a new health check has been made after 14 days. From non rabies free countries: The dog must be microchipped. The semen must not be despatched from the exporting country until 6 months after the semen collection, and a new health certificate then be issued. The dog must not have been vaccinated against rabies with a live vaccine during the 6 months prior to semen collection. The dog must not be under any quarantine restrictions. The Kennel Club requests prior application for permission to perform AI.

#### United States of America (category 1)

<u>United States Drug Administration</u> (USDA) P.O. Box 3220, Minneapolis, MN 55403-1503, USA.

<u>American Kennel Club</u> (AKC), 5580 Centerview Drive, Raleigh, NC 27606-3390, USA. Phone: +1 919.233.9767 or +1 919.854.0124; Fax: +1 919.233.3627 or +1 919.854.0102; Website:www.akc.org

Requirements: As from October 2000 no import permit is required for dog semen. The AKC requests a prior application to permit AI by imported semen. They also request a DNA sample, which can be ordered via E-mail:dna@akc.org.

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# VETERINARY HEALTH CERTIFICATE FOR EXPORT OF DOG SEMEN FROM ..... TO ..... collected and processed/froze semen from the dog (breed/name/registration number): owned by (name/address): At the time of semen collection the dog was identified by: Enclosed a signed photo or nose-print □. At the time of semen collection the dog was clinically examined and found to be free from any signs of disease, contagious or other. The dog is not suspected of carrying any disease, including Parvovirusinfection, which can be transmitted via semen. The dog has two testicles, normally developed, in the scrotum. The shipment consists of either: a) . . . . . ml of fresh, chilled semen b) . . . . . . (no.) of medium (or mini) straws of semen c) . . . . . (no.) of vials with pelletted semen d) . . . . . (no.) of vials containing thaw medium (when applicable) Date (day/month/year): Signature of Veterinarian: ..... Printed name:

Adapted from "Regulations and Recommendations for International Shipment of Chilled and Frozen Canine Semen" by C. Linde-Forsberg In: Recent Advances in Small Animal Reproduction, P. W. Concannon, G. England and J. Verstegen (Eds.) Publisher: IVIS - International Veterinary Information Service (www.ivis.org), Ithaca, NY, USA.



Certificat sanitaire pour l'importation et le transit sur le territoire métropolitain et dans les départements d'outre mer des semences canines en provenance des pays tiers

Health	certificate	for	the	importation	and	transport	of	dog	sperm	into	mainland
France	and over	seas	Frei	nch departm	ents	from othe	r c	ountr	ies		

Rev Bras Reprod Anim, Belo Horizonte, v.31, n.1, p.92-107, jan./mar. 2007. Disponível em www.cbra.org.br.

for ten days after signing.



Fait à/Signed at (town) Le /Date
Cachet et signature du vétérinaire officiel (la signature et le cachet doivent être d'une couleur différente de celle du texte imprimé) / Stamp and signature of the official veterinarian (the signature and stamp must be in a different colour to the printed text):
Nom en lettres capitales, titre et qualification du vétérinaire officiel/ Name (in upper case), title and qualifications of the official veterinarian:
(1) Joindre les résultats des analyses/ Enclose the results of these analyses.



# $MODELE\ N^\circ\ I.A.052: certificat\ vétérinaire\ pour\ l'exportation\ de\ semences\ canines\ de\ France\ vers\ la\ Nouvelle-Calédonie.$

CERTIFICAT N°:
Pays exportateur:
Autorité competente :
Renseignements relatifs au reproducteur male :
Espèce:
Race:
Date et lieu de naissance :
Nom et identification :
Date et numéro d'agrément pour l'insémination artificielle :
Séjour au centre d'insémination artificielle :
Nom et adresse du propriétaire du donneur :
Renseignements relatifs a la semence
Nom et adresse du centre de collecte :
N° d'agrément du centre de collecte :
Date(s) et heures de récolte :
Identification des paillettes :
Nombre total de paillettes :
Additifs (antibiotiques, dilueurs):
Raison sociale de l'exportateur :
Destination de la semence
Nom et adresse de l'importateur :
Moyens de transport :
Certificat sanitaire
Je soussigné,, vétérinaire officiel du gouvernement, certifie, pour ce qui concerne les animaux décrits par le certificat d'identification $N^{\circ}$ ci-joint, que :
ce qui concerne les ammaux acerns par le cermiear à racinification in trijoint, que .

# STATUT SANITAIRE DE L'ETALON.

L'étalon n'a présenté le jour du prélèvement et dans les quinze jours qui ont suivi aucun signe clinique de maladie d'Aujeszky, de leptospirose, de sarcome de Sticker et de tout autre signe clinique de maladie



contagieuse et infectieuse de l'espèce.

Date des examens cliniques :

Si il vit dans un chenil, aucun signe de maladie infectieuse et contagieuse n'a été constaté depuis 6 mois au moins et ce chenil est reconnu indemne de brucellose, de leptospirose et d'herpès virose.

L'étalon a été soumis aux épreuves suivantes avec résultat négatif au minimum 15 jours après la collecte. Les analyses sont exécutées dans un laboratoire reconnu officiellement.

Epreuve de séroagglutination sur lame vis à vis de Brucella canis;

Fixation du complément vis à vis de brucella abortus.

Date des épreuves :

## RECOLTE DE LA SEMENCE.

Le centre d'insémination est reconnu officiellement et inspecté régulièrement.

La semence a été récoltée dans de strictes conditions d'hygiène et par une équipe reconnue officiellement.

### PREPARATION DE LA SEMENCE

La semence a été conditionnée avec un dilueur constitué exclusivement de substrats stérilisés ou préparés à partir d'œufs provenant de couvoirs indemnes de maladies de Newcastle.

Elle à été soumise après congélation à une analyse qualitative(motilité des Spermatozoïdes, concentration) satisfaisante.

### STOCKAGE DE SEMENCE.

La semence est stockée dans conteneur lavé, désinfecté et stérilisé avant utilisation, conservé dans de l'azote non contaminé et dans un local agréé.

La semence a été stockée au minimum 15 jours dans l'attente des expertises cliniques et bactériologiques.

# EXPORTATION DE LA SEMENCE.

Pour l'exportation, le conteneur est scellé en présence d'un vétérinaire officiel

Fait à , le Nom et signature du vétérinaire officiel.