

# The Veterinarian and His Role in Semen Shipment (Domestic, Foreign, Past, Present, Future)

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Importation of animals from foreign countries has made the growth of the livestock population possible in the United States. Cattle, horses, swine, sheep and birds imported from Europe since the time of the Pilgrims have provided the necessary genetic material to make the United States the world power in livestock production. As the development of herds progressed, seedstock of all types was shipped throughout the United States.

Whenever livestock is moved and mingled with other livestock there exists the risk of spreading disease from area to area and herd to herd. This element of risk is recognized by animal health authorities and they have used all known precautionary measures to allow only healthy animals to be transported. Disease outbreaks have occurred despite precautions that were followed. In some cases negligence was the cause of disease outbreaks.

As global transportation improved, both man and animals have moved freely throughout the world, increasing the potential for disease spread. This has added to the problem of surveillance and maintenance of animal diseases.

Within the United States technological advances have brought many innovations to add to the complexity of animal and animal product movement. A unique example is the movement of semen, particularly from cattle. Since the late 1930's artificial insemination has been used in the United States. The A.I. industry has set its own standards and has established health programs that have been adopted voluntarily. Their record has been excellent for voluntary compliance. Importation of semen from other countries and the recent existence of over 6,000 breeders who have had the semen from their bull has brought to the front the need of regulations governing the movement of bull semen in that custom collection does not involve the adaption of rigid health requirements of the donor bull as is followed in commercial bull studs. At this time only five states have any requirements governing the interstate movement of bull semen. There have been a few major disease

outbreaks and it is known that the potential still exists in that many diseases can be spread via semen.

A proposal by the Animal and Plant Health Inspection Services for regulations governing the movement of semen are under consideration and will be republished in the Federal Register in the near future. These regulations ask for verification of the health of the donor bull. They encompass tests for brucellosis, vibriosis, trichomoniasis, leptospirosis, tuberculosis and other obvious existing diseases. They are the minimum requirements. It is the purpose of these regulations to require a health examination of every donor bull before its semen can be shipped interstate. Veterinarians involved in conducting such examinations should be acquainted with procedures required.

The United States has no export health requirements for bovine semen, therefore, the only applicable regulations are those of the importing country. At this time, we have agreements with four countries on their import requirements for bovine semen. These countries are Switzerland, Ghana, Venezuela, and Turkey.

The following requirements are for the importation of bovine semen from the United States to Ghana, Venezuela and Turkey:

1. Only the importation of semen originating from animals of high genetic standing is permitted.
2. Importers of semen are requested to apply for import permits from the Animal Production Division, Animal Health and Industrial Department, Ministry of Agriculture and Livestock, (*Division de Produccion Animal; Direccion de Sanidad e Industria Animal; Ministerio de Agricultura y Cria*), Caracas, including the following:
  - a. Name and address of the firm processing the semen.
  - b. Name and address of the individual or firm importing.

- c. Pedigree of the bull the semen has come from, as well as an official record of reproduction from his ancestors and offspring.
  - d. Number of ampules to be imported and the quantity in each.
  - e. Conservation system. (This is interpreted to mean method of processing and preserving of the semen).
  - f. The application for import permit will have to be signed by a graduate veterinarian.
3. Upon compliance with the above requirements, the Animal Production Division will approve the application for the import permit. Without such approval from the Animal Production Division no permit will be issued.
  4. No sales promotion or advertising of the semen will be allowed without prior approval of the Animal Production Division.
  5. The imported semen will be used or applied only by expert inseminators or veterinarians working under the supervision of graduate veterinarians.
  6. Violations of the above rules and regulations will be penalized according to the law.

*NOTE:* "Semen comes under the following Customs Tariff category: 201-09-13-3. Other raw material of animal origin, n.e.s. Duty is @ 0.05 per kilo."

The import health requirements of Turkey for bovine semen are a negative serum agglutination test for brucellosis in 1/25 dilution and a negative intradermal tuberculin test on donor bulls. Each test is to be performed within 30 days of the first collection of semen for Turkey. All cattle in the artificial insemination center shall have passed a negative serum agglutination test (in the dilution prescribed in uniform methods and rules) for brucellosis and a negative intradermal tuberculin test within 12 months of the first collection of semen for Turkey. Other tests performed by artificial insemination centers do not require certification by USDA.

Although the United States has no formal agreement with Canada on import requirements for bovine semen to Canada, the following Canadian regulations are quoted:

1. No person shall import into Canada the semen of animals unless he has obtained a permit therefore issued by the Veterinary Director General.
2. An application for a permit shall be made in writing to the Veterinary Director General,

and shall be accompanied by a certificate signed or endorsed by an official veterinarian of the government of the country from which the semen is being exported showing:

- a. that the animal from which the semen is to be obtained has been examined and found free of infectious or contagious disease, and
- b. where the semen is from a bull, that the bull and the herd in which it is kept have passed a negative test for tuberculosis and brucellosis within the previous twelve months.

U.S. exporters are shipping bovine semen to countries other than those listed above even though no formal agreement has been reached with these countries. Shipments to these countries are, of course, contingent upon the ability of the United States to certify to the import health requirements imposed by the importing country.

The import requirements for semen vary as to the disease status of the originating countries. The basic regulations for importing semen from designated foot-and-mouth disease infected countries may be found in section 92.4(d) of Part 92, Code of Federal Regulations. Bull semen from "Guidelines—Semen Collection Facility," which are used as standards and guidelines for the importation of semen. Sections 92.4, 92.19, and 92.31 of 9 CFR Part 92 will also be of interest to veterinarians involved in importing semen into the United States.

In conclusion, it can be said that the commercial aspects of artificial insemination of cattle in the United States has regulated itself voluntarily with an excellent record to verify its intent. In recent years, custom freezing of semen and the tremendous increase in the movement of bull semen throughout the United States has necessitated the need for regulations governing the movement of bull semen. In actuality, they merely consist of an animal determined not to transmit disease via semen by presently known practical diagnostic procedures.

The United States has no export health requirement for bovine semen, therefore, the only applicable requirements are those of the importing country. These requirements vary considerably between countries and are too complicated to discuss at this time.

The import regulations of semen vary as to the disease status of the originating countries. These regulations may be found in section 92.4(d) Part 92, Code of Federal Regulations.