Breeders are able to communicate more widely about their breeding programs and advance their breeds by shipping frozen semen. Due to this widespread communication, there has been an increase in both domestic and international shipments of canine frozen semen.

International shipments should be planned before the collection occurs. This should happen when the client first calls the clinic to inquire about freezing semen from their stud. The receptionist should inquire if there is a possibility for export. Additional questions from the receptionist should include:

1. Which country (ies) potentially have an interest in your stud?
2. Does the stud dog have a microchip number?
3. Is he current on his rabies vaccination?
   a. Is it a one year or three year rabies vaccine?
4. When was the last time he was mated naturally?

Answering these basic questions provides a good starting point for scheduling the future collection. Gathering this information gives the reproduction technician an opportunity to obtain the most recent requirements for import before the client enters the clinic.

There are some options to obtain the most current requirements for export. The United States Department of Agriculture (USDA) provides regulatory guidelines to import and export animals and animal byproducts. This includes frozen canine semen. When we are exporting frozen canine semen to a certain country, we need to make sure we follow that country’s requirements or import regulations. Key import requirements called IREGS are available on the USDA’s website. However, not all countries have their qualifications posted on the USDA’s IREG. One may obtain this information with the country of import’s Department of Agriculture or Ministry of Agriculture.

Once the current guidelines are obtained, we will examine the key requirements:

Testing/vaccinations
1. What tests or vaccinations are required?
2. When should tests and vaccination be completed?
3. Can antibiotics be added to the buffer?
4. What type of diagnostic platform is required?
5. Does the requirement state that a specific laboratory needs to complete the tests, such as a USDA approved laboratory?
6. Reserve and freeze 2cc of serum

Physical examination
1. When should a physical examination be completed?
2. Is there a specific statement that is necessary, such as for rabies or parvovirus?
3. Do the requirements state a need for a permanent form of identification in the form of a microchip or tattoo?
4. Is this specific breed of dog able to be imported in this country?

Freezing buffers and media
1. Are there specific mentions of the method of manufacturing, for example aseptic conditions or the use of micron filters?
2. Do the buffers/media contain milk or egg substance?

Straws/vial identification
1. What is necessary for straw/vial identification?
a. Permanent identification
b. Species
c. Collection date
d. Registration name/number
e. Method of freezing

**Preparation of the semen and the storage tank and vapor shipper**
1. Is there a statement regarding how the semen is collected, handled, and stored?
   a. Under the supervision of an accredited veterinarian
   b. Collected and handled with equipment that is sterilized or disposable
   c. Stored with semen that meets the same requirements; “like” semen
   d. New container or disinfected/sterilized storage and vapor shipper

**Expiration of the health certificate**
1. Do the requirements state expiration after signature?

**USDA: signatures and sealing the tank**
1. Most of the state import/export veterinary medical officers want to review the health certificate before receiving the original documentation.
2. Does a USDA veterinarian need to seal the tank?

When the health certificate is approved by the USDA, the shipment will be ready to be exported.
1. Send copies of the approved health certificate, Air Way Bill (AWB), commercial invoice to the inseminating veterinarian.
   a. The commercial invoice should state the contents, including collection and vapor shipper
   b. Four copies of the commercial invoice should be signed and placed on the outside of the container with the AWB.
   c. Copies of the approved health certificate should be located with the AWB and commercial invoice.
2. Insure the container is identified
   a. Consignee
   b. Statement that it is nonhazardous

The initial destinations of certain countries and couriers are not necessarily the airports where the customs agents or veterinarians are located. These countries will require either a direct flight or a special arrangement with the carrier.

Vapor shippers are weighed and recorded when they are shipped and when they are returned. This provides an insight into how well a shipper is maintaining its charge. Beyond recording and evaluating the vapor shipper’s data, testing is completed on each unit every quarter to determine if the vapor shipper has the correct evaporation rate. A simple calculation of the evaporation rate will help determine if the vapor shipper can maintain a charge.

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| Date: ___________ | wt 1: ________ |
| Date: ________ (24hrs from wt 1) | wt 2: ________ |

(first weight (wt 1) ________ - second weight (wt2) ________) .5606 = _______ liters/day |
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If the evaporation rate is more than 1.9 liters/day the vapor shipper is taken out of rotation (MVE Chart Dry Vapor Shippers model numbers: SC 4/3v and SC 4/2v). Depending on the warranty from the manufacturer, the vapor shipper can be return to the manufacturer to determine if the vapor shipper can be re-vacuumed.