

# **Report of the Canadian National Canine Importation Working Group**

**FINAL 09-June-2016**

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## Executive Summary

A large but unquantified number of companion animals (particularly dogs) are imported into Canada every year. Some of these animals carry pathogens that are uncommon or rare in Canada, and many of which are zoonotic. Inter-jurisdictional movement of companion animals within Canada can be associated with similar issues and disease risks. There is currently no monitoring and minimal control of companion animal movement into and within Canada. Options for reducing the disease risk to human and animal populations in Canada posed by the movement and importation of pets need to be considered.

The objective of the Working Group was to outline options and recommended strategies to mitigate these disease risks as well as to help address welfare issues with regard to transportation of companion animals exhibiting clinical signs of illness within and at Canadian borders. Currently there are very limited data available with regard to the numbers, origins and final destinations of dogs and other pets being imported into Canada. A summary of current Canadian import requirements was compiled, and compared to import requirements from a variety of other countries including the US, the EU and New Zealand. Transportation requirements for companion animals were also summarized.

Nine diseases of concern with regard to canine importation into Canada were identified including canine brucellosis, leishmaniasis, canine influenza, rabies, alveolar echinococcosis, canine heartworm, canine lungworm, screwworm and tick-borne diseases. These diseases were assessed in terms of their relative risk to public health, domestic animal health, and wildlife health, and possible mitigation factors associated with animal movement and importation.

Ultimately the Working Group explored options for intervention under 3 broad categories: prevention and education, regulatory measures, and non-regulatory measures and surveillance. Options were further classified as high, medium or low priority for implementation.

Education of stakeholders, including the public, canine rescue organizations, transportation companies, veterinarians and animal shelters is considered a priority. Education alone will not be sufficient to achieve the necessary behaviour change, but other interventions for management and surveillance, are likely to be far more successful if the reasoning behind these measures is better understood.

**Initially, the most feasible and effective option for applying some degree of monitoring and/or control to canine importation is expansion of the existing permitting system for importation of commercial dogs less than 8 months of age to include all dogs (commercial and non-commercial, regardless of age).** This would facilitate collection of more detailed information on canine importation in order to better target future interventions, provide a flexible means of applying additional import restrictions as policies are developed, and may help discourage international importation of dogs overall.

**Priority should also be given to accessing and utilizing data that are already being collected about imported companion animals,** such as the HS code data collected by the CBSA, to help inform decisions in this area going forward.

Some disease-specific import requirements were considered to be of high importance for reducing the further spread of certain diseases to and within Canadian domestic animal and wildlife populations. However, due to international trade rules most of these cannot be implemented without first establishing control programs for these diseases within Canada..

Realistically, companion animal importation (international and domestic) will not be stopped, but the goal is to manage the process without encouraging it. Any system employed also needs to be flexible enough to adjust to changing disease patterns and risks.

## The Problem

A large but unquantified number of companion animals (particularly dogs) are imported into Canada every year. Some of these animals carry pathogens that are uncommon or rare in Canada, and many of which are zoonotic. There is currently no monitoring and minimal control of companion animal importation into Canada. Inter-jurisdictional movement of companion animals within Canada (including movement from remote Northern regions) is associated with similar issues and risk of disease transmission and introduction, and essentially no monitoring or control. Options for reducing the disease risk to human and animal populations in Canada posed by these imported and translocated pets need to be considered.

While the biggest importation issues involve dogs (based on the number and profile of canine rescue organizations), other species can pose similar or different issues. While there is limited information available regarding canine imports to Canada, there is even less information available regarding importation of other pets such as cats, rabbits and smaller animals (e.g. gerbils, hamsters, rats, mice, some reptiles, amphibians and birds). Some of these species have been associated with the spread of significant zoonotic pathogens internationally (e.g. monkeypox,<sup>1</sup> *Salmonella*). Nonetheless, based on the potential impact on human health, the main focus of this work was on dogs, with consideration of other companion animals where deemed appropriate.

The following items were considered outside the scope of this work:

- Importation of livestock/food animals (which is already tightly regulated due to implications of disease importation on food safety and the agriculture industry)
- Importation of wild and/or exotic animal species (including mammals, birds, reptiles, aquatic animals)
- Illegal importation (i.e. smuggling) of animals of any kind

## Background

The number and origin of dogs that are imported into Canada every year are unknown. Recently, an independent group of concerned citizens identified 197 Canadian “rescue” organizations (including SPCAs and Humane Societies) that imported dogs into the country in 2013-2014, and an additional 21 foreign rescues that exported dogs to Canada (Appendix 1). In total, 6189 imported dogs from at least 29 different countries were identified through these rescue groups, but this is likely a significant underestimation of the number of animals imported into the country in this timeframe. This number does not include animals that were imported by private individuals (e.g. those who adopted an animal while travelling or working abroad, pets belonging to individuals who immigrated to Canada), nor the frequent movement of pets across the Canada-US border accompanying short-term visitors (e.g. vacationers). There is no registration requirement for rescue organizations, so there are likely others that were not identified by this group. Most of the dogs were imported into Ontario, Alberta and British

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<sup>1</sup> Centers for Disease Control and Prevention (CDC). (2003). Multistate outbreak of monkeypox--Illinois, Indiana, and Wisconsin, 2003. *MMWR Morb Mortal Wkly Rep.* 52(23):537-40.

Columbia. See Appendix 2 for an outline of some of the reasons and means for canine importation into Canada.

Some of these imported animals (dogs in particular) are subsequently presented to veterinarians because they are infected with pathogens that are considered “exotic” to Canada, but are not necessarily reportable or notifiable in animals (e.g. *Leishmania* spp., *Brucella canis*). Anecdotal information also indicates that these dogs have a high frequency of diseases that are present in Canada but are relatively uncommon or rare in the local canine population (e.g. canine distemper). Some provincial agriculture ministries have in turn become involved due to concern from private veterinarians and veterinary infectious disease specialists about these animals. There is potential for some of these pathogens to spread and become established/endemic within the Canadian pet population, and/or within local wildlife populations. In some cases ongoing climate change may also play a role, as insect vector ranges change and increase the potential that competent insect vectors could be present locally. Imported animals have also raised public health concerns because some of the diseases they carry are zoonotic, but animal owners, veterinarians and physicians are often unfamiliar with or unaware of the risks.

The risks of canine importation have also garnered increased attention in the US. In January 2014, the National Association of State Public Health Veterinarians (NASPHV) and its Rabies Compendium Committee submitted a letter to the US Centers for Disease Control (CDC) which said in part:

*“Current [canine importation] regulations originated in the 1950s and fail to adequately reduce the risk that a rabid animal will enter the US and threaten our ability to maintain a canine rabies variant free status. Data published by CDC estimate that over 287,000 dogs were imported into the United States during 2006 and that at least 25percent of them were too young to be vaccinated for rabies and/or lacked proper documentation.”<sup>2</sup>*

Furthermore, there are growing concerns related to an increasing trend in the use of fraudulent documentation (both rabies vaccination certificates and rabies antibody titre result reports) to import dogs across international borders. For example, a dog recently imported into the US from Egypt by a rescue organization developed clinical rabies once in the US; investigation into the dog’s history revealed that it had been imported into the US on the basis of a forged rabies vaccination certificate.<sup>3</sup>

In some cases there are also significant animal welfare concerns with transportation of companion animals, particularly with long-distance movement of animals that are clinically ill. These animals may be confined to transportation kennels in cargo areas for hours with little to no monitoring, particularly on long-haul trans-oceanic flights, potentially leading to significant physiological and psychological stress.

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<sup>2</sup> Complete letter available at

<http://www.naiaonline.org/uploads/Main Upload Directory/StatementRabies2014.pdf>

<sup>3</sup> Sinclair et al. (2015). Rabies in a Dog Imported from Egypt with a Falsified Rabies Vaccination Certificate — Virginia, 2015, MMWR. 64(49);1359-62. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6449a2.htm>

## Objectives of the Working Group report

The objective of this Working Group was to produce a report for veterinary leaders in Canada outlining options and recommendations for strategies to:

- Mitigate the risks to animal health (domestic and wildlife) and public health posed by the current system through which dogs are imported from abroad.
- Mitigate the same risks posed by unmonitored movement of animals within Canada (particularly from remote northern regions)
- Address animal welfare issues with regard to transportation of companion animals exhibiting clinical signs of illness within and at Canadian borders.

## Estimated number and disease status of companion animals being imported from other countries or remote regions

The only data currently available regarding the number and origin of dogs being imported to Canada were compiled by a group of private citizens through internet and social media searches (Appendix 1). These data certainly represent an underestimation of the total number of imported animals, as the search was not exhaustive, it is highly likely that there are organizations do not have a direct online presence, and it does not include private importation of animals by families or individuals entering Canada or returning from abroad.

Canada Border Services Agency (CBSA) has two dedicated “HS” codes for canine imports: one each for commercial dogs over (010619208301 ) and under (01619208302 ) 8 months of age, respectively. Commercial dogs include dogs for sale, adoption, breeding, show or exhibition, scientific research, etc.<sup>4</sup> However, the data collected using these codes can only be released to an authority with which CBSA has a memorandum of understanding (MOU), such as the Canadian Food Inspection Agency (CFIA). Two HS codes also exist for personal (non-commercial) dogs that are either accompanied (010619208303) or unaccompanied (010619208304) across the border. However, tracking of travellers’ personal pet dog imports would be considered a significantly larger undertaking compared to commercial dogs.<sup>5</sup>

Commercial dogs under 8 months of age require an import permit issued by the CFIA. From July 2014 to July 2015 approximately 467 permits were issued for such dogs.<sup>6</sup>

Airlines and ground transportation companies (e.g. trains, buses) that permit transportation of live animals may have records of some kind for these movements, but these numbers are not publically reported. It is unknown how much effort would be required to compile this information from even a sample of these companies, if it is at all possible. There would also be little motivation for companies to provide these data on a voluntary basis.

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<sup>4</sup> CFIA website: Importing or travelling with domestic dogs (see [resources](#))

<sup>5</sup> EL Harper, CBSA, personal communication August 2015

<sup>6</sup> Connie Rajzman, CFIA, personal communication July 2015



## Summary of current Canadian import requirements

Owned dogs and cats over 3 months of age require a current rabies vaccination certificate, or a veterinary certificate declaring the animal to be from a [country recognized by Canada as rabies-free](#). The veterinary certificate is not required to make any additional statement regarding the health of the animal (see Appendix 3 for veterinary certificate requirements). There is no waiting period between the time of rabies vaccination and importation, even for primary vaccination. Evidence of a rabies neutralizing antibody titre of at least 0.5 IU/mL is also considered acceptable.<sup>7</sup> Animals that do not meet these requirements are still allowed to enter Canada, but must be vaccinated at the owner's expense within two weeks, and the vaccination record provided to the CFIA. Import permits, health certificates, microchipping or quarantine are not required. There are no specific import restrictions for dogs and cats less than 3 months of age. There are also no specific import restrictions on assistance dogs (including rabies vaccination) when the importer is the user of the dog and accompanies the dog into Canada.

The ability to import dogs from the US under the "rescue dog" category, except in the event of a documented natural disaster, was removed in November 2013. Dogs under 8 months of age that were previously imported under this category now have to follow the requirements for commercial entry, which requires an import permit, microchip or tattoo, a veterinary health certificate, and a rabies vaccination certificate. (See Appendices 4 and 5 for a description of the import permit application process and veterinary health certificate requirements, respectively.) It has been suggested that rescue groups may attempt to avoid these requirements by having the dogs "adopted" by someone in Canada prior to importation, and thus the dogs are imported as owned rather than commercial/rescue animals. Commercial dogs over 8 months of age only require a current rabies vaccination certificate.

Ferrets may be imported without a permit from the US if they have been vaccinated for rabies in the last 12 months. Ferrets less than 3 months of age are exempt.

There are no federal requirements for import permits or health certificates for amphibians and reptiles (excluding turtles and tortoises), rabbits from the US, or rodents (excluding prairie dogs, gambian pouch rats and squirrels from most countries, any rodents from Africa, and species covered under CITES<sup>8</sup>) entering Canada. Imports are permitted from any country, for any use, to any destination in Canada. Under normal circumstances, there are no border inspections. However, Part XII of the *Health of Animals Regulations* applies to the transportation of all animals, and inspections related to humane transport may be conducted (see [Summary of requirements for transportation of animals within Canada applicable to companion animals](#) below).

Import permits are required for pet birds from any country except under certain circumstances for some birds from the US. In addition, birds from some countries may require pre- and post-import testing for avian influenza, and importation of birds of any kind is prohibited from countries where highly pathogenic avian influenza is considered endemic.

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<sup>7</sup> CFIA website: Import reference documents (as referenced in the Health of Animals regulation)(see [resources](#))

<sup>8</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora (see [resources](#))

Importation of pet primates is strictly prohibited.

The CBSA has the authority to deny entry to any animal presented for importation, including animals that appear sick with a communicable disease. There is currently no information regarding how often this authority is exercised. In these cases, confinement of the animal and further examination by a CFIA veterinarian at the owner's expense may be required prior to the animal being returned to its place of origin.

Within Canada, there are no health requirements for movement of companion animals except for those pertaining to humane transportation. There is also a limited number of specific provincial permit requirements, but these do not necessarily include health requirements:

- Alberta requires permits to possess rats under the Pest and Nuisance Control Regulation. These permits are restricted to research facilities, zoos and visitors travelling through (but not within) the province. Permits are also required to import and/or possess wildlife and controlled species under the provincial *Wildlife Act*.
- New Brunswick requires permits for exotic wildlife (bird, mammal or other vertebrate) not indigenous to the province and not listed under the *Exotic Wildlife Regulation* of the provincial *Fish and Wildlife Act*.

Some municipalities also have their own restrictions on ownership and/or containment of certain animal species, primarily targeted at large carnivores, non-human primates and large reptiles.

- For example, the City of Toronto prohibits keeping the following types of animals as pets on either a temporary or permanent basis: all Felidae other than *Felis catus*, all Canidae other than *Canis lupus familiaris*, bears, non-human primates, snakes with an adult length over 3 metres, lizards with an adult length over 2 metres, and all venomous and poisonous animals, among others.<sup>9</sup>

## Summary of international import requirements

Import requirements for companion animals (particularly dogs) into the US, New Zealand (NZ), the United Kingdom (UK), and the European Union (EU) were reviewed. The goal was to identify policies that have been successfully implemented in other countries that could potentially be employed at Canadian borders to help decrease the risk of importing companion animals carrying communicable diseases of concern.

According to the World Trade Organization (WTO), which sets out the rules for international trade, an importing country cannot impose conditions for import that are more restrictive than those applied in the importing country. This includes requiring proof of disease-free status or recent treatment for a particular disease, unless the importing country is also considered free of the disease and/or has a formal control program in place.

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<sup>9</sup> Toronto municipal code, Chapter 349, Animals. [http://www.toronto.ca/legdocs/municode/1184\\_349.pdf](http://www.toronto.ca/legdocs/municode/1184_349.pdf)

For a comparison of selected importation requirements from different countries, see Appendix 6. A summary of import requirements from each of the jurisdictions reviewed is provided here.

### US import requirements – Dogs:

- Dogs require proof of rabies vaccination *no less* than 30 days earlier.
  - Puppies must not be vaccinated against rabies before 3 months of age, so the youngest that a puppy can be imported into the US (without a confinement agreement, see below) is 4 months of age.
  - The CDC (under the US Department of Health and Human Services) does not require rabies vaccination (and a veterinary health certificate is not required) if the dog is imported from a [rabies-free country](#) (where it has lived for the past 6 months or since birth).
  - Unvaccinated dogs that arrive in the US from countries that are not considered rabies-free may be denied entry and returned to their country of origin at the importer's expense, unless they qualify for a confinement agreement. Under such an agreement, the dog must be vaccinated within 10 days of entry into the US and within 4 days of arrival at the final US destination unless the dog is less than 3 months of age. Dogs must be confined by the owner until they are vaccinated, or in the case of primary vaccination for at least 30 days after vaccination. Importers are expected to exhaust all other reasonable options for delaying the importation of dogs until the dogs are fully vaccinated against rabies before being considered for a confinement agreement. CDC reserves the right to deny requests for confinement agreements. It is explicitly stated that importing a puppy purchased outside of the US does not meet the criteria for a confinement agreement.
- If entering or returning to the US from [countries or regions where screwworm is known to exist](#) dogs must be accompanied by a certificate signed by a full-time salaried veterinary official of the region of origin stating that the dog has been inspected for screwworm within 5 days prior to shipment to the US. The certificate must state that the dog is either free from screwworm or was found to be infested with screwworm and was held in quarantine and treated until free from screwworm prior to leaving the region.
- Dogs may be denied entry if they look like they are sick with a communicable disease. If a dog appears to be sick at the port of entry (or if it was exposed to a communicable disease in transit), confinement of the animal at an appropriate facility and further examination by a licensed veterinarian at the dog owner's expense may be required.

### US import requirements – Cats:

- A general certificate of health is not required by CDC for entry of pet cats. However, pet cats are subject to inspection at ports of entry and may be denied entry into the US if they have evidence of an infectious disease that can be transmitted to humans.
  - If a cat appears to be ill, further examination by a licensed veterinarian at the owner's expense might be required at the port of entry.
- Cats are NOT required to have proof of rabies vaccination for importation into the US.

### US import requirements – General:

- If cages or containers of dogs and cats are found in an unsanitary condition, the owner must have them cleaned and disinfected before the animals can be admitted.
- There are no regulations on interstate or intrastate transportation of dogs or cats in the US.

### EU import requirements – Dogs:

- For entry to Finland, Ireland, UK, Norway (not part of EU) and Malta, treatment by a veterinarian for *Echinococcus multilocularis* between 5 days and 24 hours prior to entry (e.g. with praziquantel), whether from another member state or non-EU country.
- Microchipped or marked by a clearly readable tattoo (if applied prior to 03-Jul-2011). The identification number must appear on the rabies vaccination certificate. Exception: Tattoos are not accepted for importation to Ireland or Malta.
- Vaccinated against rabies using a licensed inactivated or recombinant product. Primary vaccinates must have received their first vaccine no less than 21 days prior to entry and at no less than 12 weeks of age. AND a rabies antibody titre of 0.5 IU/mL or greater must be measured based on a blood sample taken no less than 30 days after vaccination and no less than 3 months prior to the date of entry. (Note: The antibody titre requirement no longer applies to dogs coming from Canada.)
- “Dogs must comply with any preventive health measures for diseases or infections other than rabies considered necessary for the protection of the public.”
- A maximum of 5 dogs, cats or ferrets, accompanied by their owner, may be moved under non-commercial rules, unless the animals are registered to attend a competition, otherwise commercial rules for trade or import apply.
- Commercial animals additionally require a clinical examination by an authorized veterinarian within 48 hours of shipment, and an animal health certificate attesting to this and the other import requirements noted above.

### Additional UK-specific import requirements – Dogs:

- Brought into England using an approved carrier.
  - It is up to the carrier to ensure compliance with the relevant legislation.
  - Failure to ensure compliance may result in revocation of the carrier’s approved status.
  - Exceptions are made for dogs coming from Ireland and community carriers moving recognized assistance dogs.
- Be “free of disease”.

### NZ import requirements – Dogs and cats:

- Microchipped
- Over 8 weeks of age if coming from Australia, over 12 weeks of age if coming from a country considered rabies-free, or over 9 months of age if coming from a country where rabies is considered well-controlled.
- Not more than 42 days pregnant
- “Fit for travel”

- Not a banned breed
- Dewormed (cestodes and nematodes) twice within 30 and 4 days of shipment respectively
- Treated by a veterinarian for ticks and fleas twice within 30 and 2 days of shipment respectively
- Examined by a veterinarian within 2 days of shipping and be declared free of signs of infectious or contagious diseases and external parasites
- For dogs and cats from countries other than Australia:
  - Import permit
  - Minimum 10 day quarantine after arrival
  - Letter declaring no rabies cases in the country in the last 12 months OR vaccinated against rabies not more than 1 year prior to shipping (6 month waiting period for primary vaccination) AND rabies titre of at least 0.5 IU/mL between 3 and 24 months prior to shipping
- Importation from countries where rabies is not considered well controlled is not allowed. Animals must reside in a rabies-controlled or rabies-free country for at least 6 months prior to shipment.
- Any materials such as bedding, toys or clothing are destroyed on arrival for ectoparasite control.

#### **NZ import requirements – Dogs:**

- Negative heartworm ELISA test and treated for heartworm within 4 days of shipment (or be up to date with sustained-release moxidectin treatment). Also recommended (but not required) that dogs be tested again for heartworm 7 months after importation.
- Negative for *Babesia gibsoni* within 16 days of shipment
- Examined by a veterinarian within 2 days of shipping and be declared free of signs of transmissible venereal tumor (intact dogs only)
- For dogs from countries other than Australia:
  - Negative for *Brucella canis* within 16 days of shipment
  - Not mated with any dogs that were not known to be *Brucella*-free
  - Negative for or treated prophylactically for leptospirosis within 30 days of shipping
- Dogs ever having visited South Africa:
  - Treated with imidocarb dipropionate for *Babesia*, unless tested negative within 16 days of shipment

#### **Availability of companion animal quarantine facilities at major ports of entry into Canada**

There are currently no federal or provincial quarantine facilities for imported companion animals anywhere in Canada. Private veterinary clinics are present in all cities associated with major international airports, though not necessarily in more remote communities with small regional airports or those located near land borders. University-associated veterinary facilities are located within approximately one hour of Calgary, Saskatoon, Toronto and Montreal international airports, and the Charlottetown, PEI airport. Toronto and Vancouver international airports have temporary holding facilities for animals of all kinds which do not meet import requirements and have to be sent back to their country of origin. Kennels and similar facilities near airports may be approached by CFIA to

quarantine imported animals that are ordered to leave the country but are unable to do so for 24 hours without suitable rest time according to humane transportation laws.

The CFIA used to have livestock quarantine facilities across Canada but gave these up in favour of on-farm quarantines of animals. For example, Spruce Meadows in Calgary, AB frequently hosts international equine events, and there is a privately-owned CFIA-approved quarantine facility near this centre for that reason.

## **Summary of requirements for transportation of animals within Canada applicable to companion animals**

Part XII of the [Health of Animals Regulations](#) defines the conditions for humanely transporting animals entering or leaving Canada or within Canada. Under these regulations, every animal transported by railway car, motor vehicle, aircraft or vessel is subject to inspection at any time by an inspector. The requirements for transporting animals apply equally to pets and include the following:

- Injury or undue suffering must not be caused by loading, unloading, overcrowding, poor construction of the container (carrier), undue exposure to weather, inadequate ventilation.
- Animal must be able to stand in its natural position and able to be fed and watered inside the container at intervals of no longer than 36 hours (monogastric animals).
- Provision must be made for drainage or absorption of urine, but escape of liquid or solid waste from the container must be prevented.
- The container must be secured to prevent displacement during transportation.
- Animals in the container can be readily inspected.

The federal Criminal Code of Canada as well as provincial legislation in ON, BC, AB, SK, MB, QC, NB, and NS prohibit any person responsible for an animal to cause or permit the animal to be or to continue to be in distress. Distress is variably defined, but generally includes deprivation of adequate food, water, care, or shelter, or being injured, sick, in pain or suffering.

## **Options for Action**

Ideally, from a disease and risk management standpoint, dog importation would simply be halted altogether, and animals would not be allowed to cross provincial (or even regional) borders unless accompanied by their owner of six months or more, and meeting specific health and vaccination criteria. Realistically, dog importation (international and domestic) will not be stopped, but the goal is to manage the process without encouraging it. Any system employed also needs to be flexible enough to adjust to changing disease patterns and risks.

Action is needed to help mitigate disease risks from animals being imported into Canada or moved from high-risk areas within Canada, as well as to address concerns regarding the welfare of companion animals during transportation, particularly if they are clinically ill. Key industries involved include transportation companies (particularly airlines), the veterinary profession, and Canadian animal shelters. The pet rescue “industry” plays one of the largest roles, but unfortunately is not regulated or even

sufficiently organized or defined at this time to be a useful conduit for action in and of itself. Action could ultimately be regulatory (either federal or provincial) or non-regulatory (voluntary) in nature, and in either case could be government or industry led, or a combination thereof. Each of these routes has its own advantages and limitations to consider. In any case, measures must be practical and (if applicable) enforceable. All options that involve action at the time of importation need to involve CBSA.

## Regulatory measures

Regulatory action, particularly at the federal level, would be advantageous from the standpoint of clearly establishing Canada-wide standards for companion animal importation. However, regulatory changes would be slow to implement, potentially difficult and/or expensive to enforce, and could risk shifting pet importation to the underground/black market (i.e. smuggling) which could in turn also increase welfare issues.

**OPTION:** If a regulatory approach is chosen, it could be enforced in a (unannounced) periodic/pulsatile manner in order to reduce human resource and administrative requirements.

As per the WTO, an importing country cannot impose conditions for import that are more restrictive than those applied in the importing country, making it very difficult to institute import restrictions for diseases already present at some level in Canada and for which no formal control program currently exists.

Preventing sick animals from being transported altogether by placing the responsibility on the carriers may be difficult in some cases in which it could be claimed that the animal developed signs of illness while in transit. This could also result in more (if not most) carriers refusing to transport animals altogether, making it difficult for pets to enter the country regardless of their health status.

Currently, any animal arriving into Canada with readily apparent clinical signs of illness (e.g. diarrhea, coughing, sneezing, oculonasal discharge, dermatitis, pyoderma, ectoparasites) is supposed to be detained by the CBSA for inspection by the CFIA. From there, the animal is either released, released with conditions (e.g. vaccination or further veterinary examination within a specified time frame, to be reported back to the local CFIA office), or sent to a holding area prior to being sent back to its point of origin if entry is denied. This requirement does not prevent subclinical carriers of disease from entering the country, but does focus efforts on the animals most likely to be shedding large numbers of pathogenic organisms, and should help discourage transportation of clinically ill animals. Unfortunately, based on multiple (but anecdotal) reports, significant numbers of visibly sick or debilitated animals are still imported despite the process currently in place. The point of breakdown in the system has not been determined or investigated.

**OPTION:** Prioritize stationing CFIA inspectors once again at all major border crossings and ports of entry to relieve more of the burden of data collection and inspection of imported animals from the CBSA. CFIA inspectors have more specific training for these tasks, and this would allow CBSA staff to focus more on their priority areas.

**OPTION:** Provide additional training to CBSA (and CFIA) personnel stationed at border crossings and ports of entry to help ensure that incoming animals are appropriately flagged and screened for signs of illness before being granted entry. Ideally local CBSA personnel should be trained with and/or by CFIA personnel to help improve inter-agency communication and cooperation.

Denying sick animals entry on arrival risks having to transport a sick animal a second time in a short time frame. The capacity for holding or housing such animals, even on a short term basis or overnight, is also unclear. Although facilities do exist at major ports of entry (Toronto and Vancouver international airports), they may not exist at others, nor at land border crossings with the US. (See options listed under [Transportation of Animals](#))

**OPTION:** Institute a fine (which should be greater than the average cost of a veterinary examination) for any animal that is flagged at the border by CBSA and found by the CFIA veterinarian to be clinically ill or debilitated, regardless of further action taken (or not taken). The goal of the fine is to discourage transportation of clinically ill animals. Exemptions could be made for animals with a signed veterinary certificate stating a particular condition is due to a non-infectious cause (but that the animal can still be safely transported).

When an animal is flagged, the animal's and animal owner's information would need to be logged, and repeat offenders could be subject to heavier fines or further action. The agency responsible for tracking this information and leveling fines would need to be determined (likely CBSA or CFIA).

Better enforcement of the commercial animal versus personal pet designation at the time of importation is also important to prevent rescue groups from evading current (or future) import requirements; however, it is unclear how this could be achieved other than flagging individuals who are found to be importing multiple "personal pets" within a particular timeframe.

**OPTION:** Extend import requirements currently enforced only for commercial dogs under 8 months of age to all dogs (owned and commercial) of any age. An exception could be made for dogs travelling with their owner that originated in Canada and have not been out of the country for more than a specific amount of time (e.g. 6 months). This would accommodate Canadian residents who travel with their dogs for vacation or seasonally, but would capture all dogs being brought into the country by rescue groups. A fee for the permits would help offset added administrative costs for such a requirement, and could help further discourage international importation. Extending the permitting system in this manner also potentially provides a flexible means of applying additional conditions as deemed necessary.

Due to lack of monitored inter-provincial borders, measures such as this would be more effectively applied at the federal level (i.e. importation into Canada) than at the provincial level. However, regulatory measures could potentially be applied by provinces and territories at major transportation hubs (e.g. airports, bus and train stations), which would at least capture a significant proportion of imported high-risk pets.



## Non-regulatory measures

**OPTION:** Discourage canine importation by promoting domestic dog rescue over foreign dog rescue (“Adopt local” campaign). Consider taking out an advertisement on petfinder.com (and/or similar sites) for this purpose, as this will effectively reach the target audience (those looking to adopt a pet).

The majority of dog importers are trying to “do the right thing” but are often simply unaware of the problems these animals can have and cause going forward. Raising awareness of the issues could therefore potentially have a significant impact for relatively low cost.

**OPTION:** For each dog being imported, provide a list of diseases for which the animal should be tested/treated and that should be discussed with the dog’s veterinarian.

The lists could be tailored to the country/region of origin and thus would not require any veterinary expertise to select the correct list. The list could be handed to the person accompanying the dog, or provided as a sticker placed directly on the dog’s kennel (thus ensuring it does not get lost or discarded) or both. Although not enforceable, such an item would help increase awareness of disease issues at the time of arrival. Creating the initial lists could be challenging, but making the lists region (vs country) specific and focusing on diseases of the greatest concern (rather than an exhaustive list) would help simplify the task. A plan for updating the lists on a regular basis would also need to be established.

**OPTION:** Develop and distribute an educational infosheet that can be given out by veterinarians to those involved in canine rescue organizations, as well as to owners of newly imported dogs.

An infosheet of this kind will help increase awareness of disease issues, although there may be considerable lag between the dog’s arrival and receipt of the information, which increases the likelihood of disease transmission in the interim. If distributed by veterinarians, this option relies on the animal being brought to a veterinary clinic initially, which may not occur in many cases (at least until the animal becomes ill).

**OPTION:** Develop guidelines for commercial carriers (especially airlines) regarding verifying the health status of animals being transported. If carriers were to adopt (and enforce) policies stipulating specific health requirements for pets prior to transport, this could be a very effective means of discouraging transportation of sick dogs, as carriers are entitled to refuse to transport any item, including animals. This could also be an effective means of reducing the amount of translocation of dogs without adequate previous rabies vaccinations from remote northern communities within Canada.

Going forward, additional data on canine importation will be required in order to appropriately tailor and focus disease control efforts.

**OPTION:** Work with CBSA to provide a record of commercial dogs imported into Canada based on existing HS codes, as well as country of origin, port of entry and intended final destination within Canada. These data should be made available on at least an annual basis or more frequently through an MOU with provincial/territorial ministries. However, if rescue dogs continue to be imported under the guise of personal pets in order to avoid the commercial import requirements, these data alone will have

limited accuracy and utility. Inclusion of the name of the importer would also be useful in order to flag higher-risk individuals for targeted investigation or education, while still maintaining confidentiality/privacy.

**OPTION:** Work with the CBSA to provide a record of traveller-accompanied dogs imported into Canada based on existing HS codes, as well as country of origin, port of entry and intended final destination within Canada. These data should be made available on at least an annual basis or more frequently through an MOU with provincial/territorial ministries. In combination with information on commercial canine imports, this will provide a much more accurate measure of total canine importation to Canada.

**OPTION:** Approach commercial airlines, bus companies and train companies to provide a tally (annually or more frequently) of dogs transported domestically within and internationally to Canada, with details on origin and destination if available.

**OPTION:** Promote a voluntary registry of imported dogs. If done through veterinary clinics, when an imported dog is examined the basic signalment, current residence, permanent residence (if known) and any current disease issues (suspected or confirmed) would be recorded. Rescues could also be encouraged to register imported dogs in order to capture those that may not be seen by a veterinarian. The agency responsible for collecting the data and maintaining the database would need to be determined (e.g. provincial or federal government, provincial veterinary associations, a university, other).

Although it is an option for consideration, the Working Group was highly skeptical of how effective any kind of voluntary registry would be. Expansion of the import permitting system (see option above under [regulatory measures](#)), while more resource-intensive, would likely be substantially more effective, and could be used to collect most of the desired information.

The HS code information collected by the CBSA also constitutes a “mandatory” version of such a registry, but would need to be expanded to include information on the intended final destination of the animal within Canada (see option above under [regulatory measures](#)).

**OPTION:** Promote a voluntary registry of canine rescue organizations, particularly including (but not exclusive to) those that import dogs to Canada or from remote Northern regions of Canada. This would provide a communication link with at least a proportion of these groups in the event of regional or international emerging disease concerns. The challenge would be to provide some kind of (additional) benefit or motivation for groups to register (either one-time or ongoing); for example, lower import permit fees for registered rescues. The agency responsible for collecting the data and maintaining the database would need to be determined.

### **Establishment of quarantine facilities for imported companion animals**

Development of a quarantine facility for horses arriving in Toronto has been discussed in follow up to the Pan-American Games, as many of the competition horses had to be quarantined in Miami and transported in sealed trailers for 36 hours to get to Toronto.

**OPTION:** Consideration should be given to establishing a small adjoining companion animal quarantine facility for future use. The required security level would need to be assessed, as it may differ from the requirement for an equine/large animal quarantine facility.

At this time, the Working Group does not consider government-controlled quarantine a practical option for control of any of the diseases evaluated in this report. However, under exceptional circumstances or with the emergence of new diseases, having such a facility in proximity to a major port of entry (Toronto) could be extremely useful. The alternative would be to establish quarantine areas as needed at private facilities (e.g. veterinary clinics, animal shelters) or at facilities not designed for handling animals, both of which pose a variety of logistic and safety issues.

**OPTION:** In the absence of a designated companion animal quarantine facility, standing arrangements (either formal or informal) should be established by the CFIA with nearby clinics or other animal housing facilities for at least short-term isolation of animals that arrive with signs of a potentially communicable disease. Such an arrangement could include ensuring a minimum standard for the facility and training of personnel is consistently met so animals are appropriately handled based on the perceived risk. (Note: this option parallels that for handling of animals transported under unsatisfactory conditions, see below under [Transportation of animals to, from and within Canada](#)).

## Summary of disease risks

The Working Group identified 9 diseases/disease groups of primary concern with regard to importation into and inter-regional movement of dogs within Canada. Basic information and factors considered in the risk assessment of each disease can be found in the Appendix 7 (Tables 1 and 2). The following is a brief summary of the overall risk assessments and associated recommendations for mitigating the risks identified.

It is important to note that according to WTO rules, import requirements could only be implemented for one of these diseases (rabies) as it is the only one for which a control program exists, and all others have been shown to be present in different regions of Canada at some level. Establishment of specific (versus general) import requirements may therefore also require development of a control program of some kind within Canada.

### Brucellosis

- Relatively low risk to public health and local pet population associated with importation of dogs, unless they are involved in breeding activities. Disease in humans can be severe/chronic in a small percentage of cases. Spayed/neutered dogs are minimal risk for transmission. **OPTION:** Educational materials should be provided to importers of intact dogs on arrival in Canada.
- **OPTION:** Additional education of individuals involved in dog breeding to require testing of dogs coming in contact with their own stock may also be beneficial, particularly if the dogs come from outside of Canada. There are some breeders that already do this, but it is unknown how prevalent the practice is. Information for breeders could be provided through kennel clubs and veterinarians.

## Canine Influenza

- Testing prior to import is impractical based on timing requirements and current cost of testing. Testing is primarily based on serology (significant lag, does not differentiate infection from exposure) or PCR (may not detect new/emerging subtypes or intermittent shedding).
- A vaccination requirement prior to import could be problematic due to limited availability of vaccine in some areas/countries, and regardless existing vaccines may not provide protection against new/emerging subtypes (i.e. H3N2).
- Quarantine of imported dogs for 48-96 hours and testing to detect canine influenza would potentially be effective based on the short incubation period of the virus, but is impractical and excessively costly given the limited risk posed to public and animal health at this time.
- Control measures based on clinical signs will not be entirely effective due to common subclinical shedding of virus and the range of other canine pathogens that produce similar signs of disease.
- **OPTION:** Any dog entering Canada that exhibits signs of respiratory disease should either be:
  - A. refused entry altogether.
  - B. required to undergo a veterinary examination at the owner's expense within 24 hours of arrival. Failure to do so should result in a fine greater than the cost of a veterinary examination and testing (e.g. \$250). The agency responsible for issuing such an order and tracking compliance/levying fines would need to be determined. The owner must also be instructed to avoid dog-to-dog contact prior to the examination, acknowledging that there is no practical means of enforcing this without formally quarantining the dog.

## Leishmaniasis

- Currently limited risk of spread from infected imported dogs to humans or other animals via bites or blood exposure, as long as there is no competent vector present in Canada. However, if a local insect species is found to be a competent vector and comes in contact with a positive animal, the disease could spread to wildlife hosts making it extremely difficult to eradicate thereafter. The other possibility is northward spread of known competent vectors from the US, particularly with climate change; however, as the vectors spread the disease will likely spread with them, at which point imported animals would not be significant contributors to the disease issue.
- High-risk breeds (Foxhounds, Corsicas, Spinones and Neapolitan Mastiffs) from any jurisdiction (especially the US) may pose the highest risk to Canadian dogs, particularly within these breeds where there is evidence of dog-dog transmission. **OPTION:** Consider requiring screening of these breeds for exposure to *Leishmania* prior to import, though this could be complicated by the need for reliable breed identification.
- Rescue or commercial dogs from high risk countries should be screened for exposure to *Leishmania* prior to import. **OPTION:** Seropositive dogs should be denied entry due to the risk that they are infected and will require life-long treatment, making them a disease risk but also poor candidates for adoption.
- **OPTION:** Those privately importing (or returning with) dogs from high-risk countries should receive written information on leishmaniasis risks, and on clinical signs of the disease.

## Rabies

- Significant risk of importation with severe consequences for exposed animals and people. Some control measures are already in place, but additional measures are required.
- **OPTION:** Adopt similar import requirements for rabies as US (i.e. all dogs must be current on rabies vaccination with first vaccination given no less than 30 days prior to import, therefore no animals under 4 months of age can be imported unless they can be quarantined (at home or otherwise) until this requirement is met), but apply them to both cats and dogs.
- **OPTION:** The same requirements should be applied dogs being moved from high risk areas within Canada.
  - This could be enforced for animals being transported by air or other commercial transportation (e.g. bus) which would be the highest risk for contact with large numbers of people (e.g. rabid dog imported from NWT to SK via AB in 2014)
  - There would be no way to enforce this for private transportation (e.g. by car).
- The vaccination requirement ensures that each animal has been examined by a veterinarian at some point, but does not eliminate the risk of a rabid animal being imported. **OPTION:** Importers of animals from high-risk countries should receive written information on rabies risks and what to do if the animal develops behaviour change / neurological signs in the six months following import.
- **OPTION:** (Continue to) promote subsidized mass vaccination of domestic dogs in remote areas with limited/infrequent access to veterinary care, as the most effective way to control rabies in this population and protect the human population.
  - It is worth noting that existing programs of this kind in the Northwest Territories and Nunavut are often refused by local residents. More targeted programs on local reservations, possibly in conjunction with spay/neuter/population control programs, may be more successful.

## Alveolar echinococcosis

- Infected imported animals are a reservoir capable of causing significant environmental contamination, potentially resulting in infection of people, the consequences of which are very severe. Infection of wildlife intermediate hosts (small mammals, rodents), would create a wildlife reservoir that may be impossible to eliminate, leading to a high risk of spread to both wild canids and domestic dogs.
- *E. multilocularis* may already be established in wildlife in Ontario and Alberta, which may make it difficult to impose border controls if the disease is considered endemic. However, imported dogs that are destined to be family pets may have contact with considerably more people (either directly or indirectly) than wildlife, therefore action could still be justified given that treatment for cestodes is relatively simple and non-invasive.
- **OPTION:** All imported dogs be treated for cestodes prior to importation (consider similar protocol to NZ – within 30 days and 4 days).

### Canine lungworm

- Negligible public health risk, low to moderate risk to domestic and wild canids. Already endemic in Maritimes, with increasing evidence of westward spread as far as Ontario, which makes it difficult to impose national import requirements. Sensitivity of Baerman fecal evaluation or fecal float is unknown.
- Treatment is straightforward and easily accessible (benzimidazoles or avermectins), and is also effective against a number of other endoparasites and ectoparasites (including fleas).
- **OPTION:** Recommend (but not require) treatment for lungworm shortly before or after importation, particularly for dogs coming from high-risk areas (e.g. Maritimes).

### Canine heartworm

- Infected imported animals are a reservoir capable of infecting mosquitoes and pose a genuine threat to other canids during mosquito season. Sensitive, specific, relatively non-invasive, readily available testing is available.
- However, the parasite is already present in Canada with no control program.
- **OPTION:** Require testing of all dogs before and after importation (consider similar protocol to NZ), as this could significantly help to curb increasing heartworm incidence in Canada.

### Tick-borne diseases

- “Adventitial” ticks on imported dogs are of limited concern as they will generally not result in establishment of new tick populations (possible exception of *R. sanguineus*). Dogs are dead-end hosts for most tick-borne diseases of concern and therefore low risk of spreading infection to local tick populations. Examination of all dogs for tick infestations on arrival would be very time consuming, insensitive and impractical based on this risk.
- Testing for tick-borne diseases is problematic due to reliance on serology which does not differentiate infection from exposure.
- **OPTION:** All dogs must be treated with an acaricide effective against ticks prior to importation (consider timeline, e.g. within 24 hours).
- **OPTION:** Alternatively, focus should be on treatment of tick infestations as part of general health care before or after importation, and veterinary staff should pay close attention to basic infection control practices to prevent disease transmission when handling blood or tissues from imported animals.

### Screwworm

- Unlikely to become established in Canada due to climate. Relatively easy to treat in humans and companion animals. No action required.

## Transportation of animals to, from and within Canada

Legislation available under Part XII of the [Health of Animals Regulations](#) should be adequate to ensure humane transportation of dogs and other companion animals if it is enforced. Although the legislation applies to all animals, its primary focus is livestock. Based on anecdotal reports of animals arriving in

Canada in very poor states of health and sanitation yet still being granted entry, it appears these regulations are often not enforced adequately for companion animals.

**OPTION:** CBSA (and/or CFIA) personnel stationed at border crossings and ports of entry must be made more aware of these requirements and empowered to enforce them in order to deter inhumane shipment of companion animals.

There is still the question of what to do in the cases of animals that are not transported in compliance with existing regulations. Returning animals immediately to their place of origin when they have already endured transport (often for many hours) under unsatisfactory conditions only exacerbates the problem. This often results in the animals being cleared by CBSA to go to the owner's home with an alert to the CFIA. However, once the animal is at the owner's home it becomes extremely difficult to effectively order the animal back out of the country, even if it did not meet the required import requirements.

**OPTION:** Provide CBSA and/or CFIA with (or empower the use of) the authority to send animals that have been transported under unsatisfactory conditions (or that arrive with signs of clinical illness) to a local veterinary clinic at the owner's expense until the owner can arrange for satisfactory transportation elsewhere. Standing arrangements (either formal or informal) should be established with nearby clinics. Pets would need to be picked up directly by clinic personnel, or sent via a pet transportation service to ensure compliance with such an order.

Veterinarians and staff at these designated clinics would presumably gain additional experience and knowledge with regard to diseases of significant zoonotic concern or highly transmissible/exotic disease that imported animals may carry, thus improving the likelihood that such diseases would be identified and treated early. Certain conditions could also be reported to animal health or public health officials depending on the disease risk and the circumstances (including expected owner compliance).

It has been suggested that provincial animal welfare legislation would likely be the best piece of legislation to use or modify to better control the physical transportation of dogs if needed. There are several pieces of legislation that address the requirements for the physical transportation of pet dogs within and into Canada. Provincial animal welfare legislation also contains sections similar to the federal Criminal Code prohibiting cruelty toward and neglect of animals. However, as mentioned previously, without monitored provincial borders it would likely only be feasible to enforce legislation at major transportation hubs (e.g. train/bus station, airport).

## Working Group Recommendations

The options presented in the preceding text were categorized by the working group members into the following 3 broad categories:

- Prevention and education
- Regulatory measures
- Non-regulatory measures and surveillance

The options were further classified as high, medium or low priority for implementation as follows:

- High priority: Will provide crucial data to inform decision making going forward, or have the potential to have a significant impact on disease risk and/or animal welfare for a reasonable cost/effort.
- Medium priority: Will provide information that could be useful but is not considered critical, the cost-benefit in terms of impact on disease risk and/or animal welfare is not as favourable, or there are other regulatory issues that must be overcome before the option can be implemented.
- Low priority: Will provide information for which an alternate surrogate measure is available, or which is not actionable, or the cost/effort is considered too high for the anticipated impact on disease risk and/or animal welfare, or preferable alternatives exist.

## Prevention and education:

### High priority

**OPTION:** Discourage canine importation by promoting domestic dog rescue over foreign dog rescue (“Adopt local” campaign). Consider taking out an advertisement on petfinder.com (and/or similar sites) for this purpose, as this will effectively reach the target audience (those looking to adopt a pet).

**OPTION:** Develop and distribute an educational infosheet that can be given out by veterinarians to those involved in canine rescue organizations, as well as to owners of newly imported dogs.

**OPTION:** Develop guidelines for commercial carriers (especially airlines) regarding verifying the health status of animals being transported.

**OPTION (Brucellosis):** Educational materials should be provided to importers of intact dogs on arrival in Canada.

**OPTION (Leishmaniasis):** Provide those privately importing (or returning with) dogs from high-risk countries with written information on leishmaniasis risks, and on clinical signs of the disease.

### Medium priority

**OPTION:** For each dog being imported, provide a list of diseases for which the animal should be tested/treated and that should be discussed with the dog’s veterinarian.

**OPTION (Brucellosis):** Additional education of individuals involved in dog breeding to require testing of dogs coming in contact with their own stock may also be beneficial, particularly if the dogs come from outside of Canada.

**OPTION (Rabies):** Importers of animals from high-risk countries should receive written information on rabies risks and what to do if the animal develops behaviour change / neurological signs in the six months following import.



**OPTION (Canine lungworm):** Recommend (but not require) treatment for lungworm shortly before or after importation, particularly for dogs coming from high-risk areas (e.g. Maritimes).

### Low priority

**OPTION (Rabies):** (Continue to) promote subsidized mass vaccination of domestic dogs in remote areas with limited/infrequent access to veterinary care, as the most effective way to control rabies in this population and protect the human population.

**OPTION (Tick-borne diseases):** Recommend treatment of tick infestations as part of general health care before or after importation, and that veterinary staff pay close attention to basic infection control practices to prevent disease transmission when handling blood or tissues from imported animals.

## Regulatory measures:

### High priority

**OPTION:** Extend import requirements currently enforced only for commercial dogs under 8 months of age to all dogs (owned and commercial) of any age.

**OPTION (Rabies):** Adopt similar import requirements for rabies as US (i.e. all dogs must be current on rabies vaccination with first vaccination given no less than 30 days prior to import, therefore no animals under 4 months of age can be imported unless they can be quarantined (at home or otherwise) until this requirement is met), but apply them to both cats and dogs.

**OPTION:** Provide additional training to CBSA (and CFIA) personnel stationed at border crossings and ports of entry to help ensure that incoming animals are appropriately flagged and screened for signs of illness before being granted entry. Personnel should also be made more aware of requirements for transportation of animals applicable to companion animals and empowered to enforce them in order to deter inhumane shipment of companion animals. Ideally local CBSA personnel should be trained with and/or by CFIA personnel to help improve inter-agency communication and cooperation.

**OPTION:** Provide CBSA and/or CFIA with (or empower the use of) the authority to send animals that have been transported under unsatisfactory conditions to a local veterinary clinic at the owner's expense until the owner can arrange for satisfactory transportation elsewhere. Standing arrangements (either formal or informal) should be established with nearby clinics. Pets would need to be picked up directly by clinic personnel, or sent via a pet transportation service to ensure compliance with such an order.

**OPTION:** In the absence of a designated companion animal quarantine facility, standing arrangements (either formal or informal) should be established by the CFIA with nearby clinics or other animal housing facilities for at least short-term isolation of animals that arrive with signs of a potentially communicable disease. Such an arrangement could include ensuring a minimum standard for the facility and training of personnel is consistently met so animals are appropriately handled based on the perceived risk. (Note: this option parallels that for handling of animals transported under unsatisfactory conditions)

### Medium priority

**OPTION (Rabies):** The same requirements [similar to current US import requirements for rabies] should be applied to dogs being moved from high risk areas within Canada.

**OPTION:** Prioritize stationing CFIA inspectors once again at all major border crossings and ports of entry to relieve more of the burden of data collection and inspection of imported animals from the CBSA.

**OPTION:** Institute a fine (which should be greater than the average cost of a veterinary examination) for any animal that is flagged at the border by CBSA and found by the CFIA veterinarian to be clinically ill or debilitated, regardless of further action taken (or not taken).

**OPTION (Canine influenza):** Any dog entering Canada that exhibits signs of respiratory disease should either be:

- A. refused entry altogether.
- B. required to undergo a veterinary examination at the owner's expense within 24 hours of arrival. Failure to do so should result in a fine equivalent to or greater than the cost of a veterinary examination (e.g. \$100). The agency responsible for issuing such an order and tracking compliance/levying fines would need to be determined.

**OPTION (Alveolar echinococcosis):** All imported dogs be treated for cestodes prior to importation (consider similar protocol to NZ – within 30 days and 4 days).

**OPTION (Leishmaniasis):** Require screening of [high-risk] breeds for exposure to *Leishmania* prior to import.

**OPTION (Leishmaniasis):** Deny entry to seropositive dogs due to the risk that they are infected and will require life-long treatment, making them a disease risk but also poor candidates for adoption.

**OPTION (Canine heartworm):** Require testing of all dogs before and after importation (consider similar protocol to NZ).

### Low priority

**OPTION (Tick-borne diseases):** All dogs must be treated with an acaricide effective against ticks prior to importation (consider timeline, e.g. within 24 hours).

**OPTION:** If a regulatory approach is chosen (at any level of government), it could be enforced in a (unannounced) periodic/pulsatile manner in order to reduce human resource and administrative requirements.

## Non-regulatory measures and surveillance

### High priority

**OPTION:** Work with CBSA to provide a record of commercial dogs imported into Canada based on existing HS codes, as well as country of origin, port of entry and intended final destination within

Canada. These data should be made available on at least an annual basis or more frequently through an MOU with provincial/territorial ministries.

**OPTION:** Work the CBSA to provide a record of traveller-accompanied dogs imported into Canada based on existing HS codes, as well as country of origin, port of entry and intended final destination within Canada. These data should be made available on at least an annual basis or more frequently through an MOU with provincial/territorial ministries.

### Medium priority

**OPTION:** Approach commercial airlines, bus companies and train companies to provide a tally (annually or more frequently) of dogs transported domestically within and internationally to Canada, with details on origin and destination if available.

### Low priority

**OPTION:** Promote a voluntary registry of imported dogs. If done through veterinary clinics, when an imported dog is examined the basic signalment, current residence, permanent residence (if known) and any current disease issues (suspected or confirmed) would be recorded. Rescues could also be encouraged to register imported dogs in order to capture those that may not be seen by a veterinarian. The agency responsible for collecting the data and maintaining the database would need to be determined (e.g. provincial or federal government, provincial veterinary associations, a university, other).

**OPTION:** Promote a voluntary registry of canine rescue organizations, particularly including (but not exclusive to) those that import dogs to Canada or from remote Northern regions of Canada. This would provide a communication link with at least a proportion of these groups in the event of international emerging disease concerns. The challenge would be to provide some kind of (additional) benefit or motivation for groups to register (either one-time or ongoing). The agency responsible for collecting the data and maintaining the database would need to be determined.

**OPTION:** Consider establishing a small adjoining companion animal quarantine facility for future use [if an equine quarantine facility is established near Toronto or any other major port of entry].

## Discussion / Conclusion

Education of stakeholders, including the public, canine rescue organizations, transportation companies (particularly airlines), veterinarians and animal shelters is considered a priority. Education alone will not be sufficient to achieve the necessary behaviour change, but other interventions for management and surveillance, whether regulatory or non-regulatory, are likely to be far more successful if the reasoning behind these measures is better understood. There are no regulatory barriers to educational measures, so these options can essentially be actioned immediately.

Initially, the most feasible and effective option for applying some degree of monitoring and/or control to canine importation is expansion of the existing permitting system for importation of commercial dogs less than 8 months of age to include all dogs (commercial and non-commercial, regardless of age). This

would facilitate collection of more detailed information on canine importation in order to better target future interventions, provide a flexible means of applying additional import restrictions as policies are developed, and may help discourage international importation of dogs overall.

Priority should also be given to accessing and utilizing data that are already being collected about imported companion animals, such as the HS code data collected by the CBSA, to help inform decisions in this area going forward.

Some disease-specific import requirements were considered to be of high importance for reducing the further spread of certain diseases to and within Canadian domestic animal and wildlife populations. However, due to international trade rules most of these cannot be implemented without first establishing control programs for these diseases within Canada, therefore they were listed as medium priority for implementation until this regulatory barrier can be overcome.

Addressing the issues associated with canine importation in Canada will certainly require multiple options to be developed or addressed simultaneously. Although the options in each category have been given a priority level, it is important to ensure this does not hamper implementation of measures that form an effective “package”.

## Resources

### Canada:

Federally reportable disease under the Health of Animals Act:

<http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/eng/1303768471142/1303768544412>

Automated Import Reference System (AIRS) – CFIA: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/airs/eng/1300127512994/1326599273148>

Rabies-free countries and political units (CFIA): <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/rabies-free/eng/1332398392743/1332420396801>

Import reference documents (as referenced in the Health of Animals regulations):

<http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/2002-3/eng/1321037138426/1321037471380>

Import or travelling with pet amphibians and reptiles: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/amphibians-and-reptiles/eng/1326658752555/1326658911065>

Importing or travelling with domestic cats: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/cats/eng/1331904105485/1331904720313>

Importing or travelling with domestic dogs: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/dogs/eng/1331876172009/1331876307796>

Importing or travelling with pet birds: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/birds-other/eng/1326819245810/1326819465543>

Importing or travelling with pet birds from the US: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/birds-us/eng/1326661204161/1326661329675>

Importing or travelling with pet rodents: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/rodents/eng/1331869343204/1331869905125>

Importing or travelling with other kinds of pets: <http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/eng/1326600389775/1326600500578>

Alberta Pest & Nuisance Control Regulation:

[http://www.qp.alberta.ca/1266.cfm?page=2001\\_184.cfm&leg\\_type=Regs&isbncIn=9780779746255](http://www.qp.alberta.ca/1266.cfm?page=2001_184.cfm&leg_type=Regs&isbncIn=9780779746255)

New Brunswick Fish and Wildlife Act: <http://laws.gnb.ca/en/ShowTdm/cs/F-14.1/>

## USA:

Bringing an animal into the United States: <http://www.cdc.gov/importation/bringing-an-animal-into-the-united-states/index.html>

Bringing a dog into the United States: <http://www.cdc.gov/importation/bringing-an-animal-into-the-united-states/dogs.html>

Import health requirements of Canada for dogs from the United States:  
[https://www.aphis.usda.gov/regulations/vs/iregs/animals/downloads/ca\\_cn.pdf](https://www.aphis.usda.gov/regulations/vs/iregs/animals/downloads/ca_cn.pdf)

### Other useful references:

American Veterinary Medical Association. Relocation of Dogs & Cats for Adoption: Best Practices. August 2014. Available at:  
[https://www.avma.org/KB/Resources/Reference/AnimalWelfare/Documents/AVMA\\_BestPracticesAdoption\\_Brochure.pdf](https://www.avma.org/KB/Resources/Reference/AnimalWelfare/Documents/AVMA_BestPracticesAdoption_Brochure.pdf) Accessed 07-Oct-2015.

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[Companion animal container guidelines](#) issued by the International Air Transport Association.

International Pet and Animal Transportation Association. Looking for a pet online? Don't get scammed! Available at: <http://www.ipata.org/pet-scams/> Accessed 07-Oct-2015.

### Selected disease references:

Alvar J, Vélez ID, Bern C, Herrero M, Desjeux P, Cano J, et al. (2012). Leishmaniasis Worldwide and Global Estimates of Its Incidence. *PLoS ONE*, 7(5): e35671. (includes "Leishmaniasis Country Profiles" for 101 countries)

Catalano S, Lejeune M, Liccioli S, Verocai GG, Gesy KM, Jenkins EJ, et al. (2012). *Echinococcus multilocularis* in urban coyotes, Alberta, Canada. *Emerg Infect Dis*.  
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Centres for Disease Control (CDC). Maps of Leishmaniasis.  
[http://www.who.int/leishmaniasis/leishmaniasis\\_maps/en/](http://www.who.int/leishmaniasis/leishmaniasis_maps/en/). Accessed May 19<sup>th</sup>, 2015

Companion Animal Parasite Council – Overview of lungworms. <http://www.capcvet.org/capc-recommendations/lungworms>. Accessed 31-Aug-2015

Dergousoff SJ, Galloway TD, Lindsay LR, Curry PS, Chilton NB. (2013). Range expansion of *Dermacentor variabilis* and *Dermacentor andersoni* (Acari: Ixodidae) near their northern distributional limits. *J Med Entomol*. 50(3):510-20. (Distribution of ticks in Canadian prairies, especially SK)

Hampson K, Coudeville L, Lembo T, et al. (2015). Estimating the Global Burden of Endemic Canine Rabies. *PLoS Neglected Tropical Diseases*. 9(4):e0003709. doi:10.1371/journal.pntd.0003709.

Massolo A, Liccioli S, Budke C, Klein C. (2014). *Echinococcus multilocularis* in North America: the great unknown. *Parasite*. 21:73. doi: 10.1051/parasite/2014069. [http://www.parasite-journal.org/articles/parasite/full\\_html/2014/01/parasite140082/parasite140082.html](http://www.parasite-journal.org/articles/parasite/full_html/2014/01/parasite140082/parasite140082.html)

Ogden NH, St-Onge L, Barker IK, et al. (2008). Risk maps for range expansion of the Lyme disease vector, *Ixodes scapularis*, in Canada now and with climate change. *International Journal of Health Geographics*. 7:24. doi:10.1186/1476-072X-7-24. <http://www.ij-healthgeographics.com/content/7/1/24>

Otero-Abad B, Torgerson PR (2013). A Systematic Review of the Epidemiology of Echinococcosis in Domestic and Wild Animals. *PLoS Neglected Tropical Diseases*, 7(6):e2249. (Extensive review of the global epidemiology and ecology of *E. granulosus* and *E. multilocularis*.)

Tick distribution maps (US): [http://www.cdc.gov/ticks/geographic\\_distribution.html](http://www.cdc.gov/ticks/geographic_distribution.html)

### **Selected news articles:**

Gillis, C. How Canada became a haven for the world's unwanted dogs. *MacLean's*, March 28, 2013. <http://www.macleans.ca/news/canada/give-us-your-mangy-masses/>

Clifton M. Rollover crash reignites controversy over dog rescue traffic from US to Canada. *Animals 24-7*, September 16, 2014. <http://www.animals24-7.org/2014/09/16/rollover-crash-reignites-controversy-over-dog-rescue-traffic-from-u-s-to-canada/>

Appendix 1:

# Importation of Dogs into Canadian Rescues – 2014



# Importation of Dogs into Canadian Rescues

## 1 HOW MANY? FROM WHERE?

---

In order to determine the magnitude of this activity it is necessary to identify

- How many dogs are being imported into Canadian Rescue Organizations?; and
- How many Canadian Rescue Organizations are importing dogs?; and
- From where are these rescue dogs coming?; and

We set out on a mission to find this information, assuming that this data was collected by a governmental agency. Much to our dismay we discovered that no governmental agency collects or tracks this information. Statistics Canada does not. Canadian Border Security Agency does not. Canadian Food Inspection Agency does not.

It was, therefore, up to a handful of concerned Canadian taxpayers / voters and animal lovers to go about attempting to quantify the activity of importing dogs, from foreign countries, into Canadian Rescues.

## 2 HOW WE TACKLED THIS PROJECT

---

Our methodology was to scour the Internet (social media such as Facebook, Yahoo Groups, etc) to identify the Canadian Rescue Organizations which import dogs and the foreign rescues which export dogs to Canadian Rescue Organizations. Finally, we searched out the transport networks utilized to 'ship' these dogs to the respective Canadian Rescue Organization.

Once the foregoing information was gathered and documented, the respective social media site was carefully scrutinized and import data was collected by way of screen captures or links to related news media coverage. The information was entered into an Access Database identifying the receiving Canadian Rescue Organization, the country of origin, mode of transport, dogs under 8 months of age were identified including the collected 'proof' (screen captures, links to new articles etc).

However, the data which we have collected is merely the tip of the iceberg; many rescues do not announce where they source their dogs or how they are transported to the rescue.

## 3 HOW MANY CANADIAN RESCUES WERE IDENTIFIED AS IMPORTING DOGS?

---

We identified [197 Canadian Rescue Organizations](#) (including SPCA's and Humane Societies) which imported dogs in 2013 – 2014. This represents close to 20% of all Canadian Rescue Organizations.

(NOTE: new rescues are opening on a weekly basis and the majority of those are importing dogs). A further [21 foreign rescues](#) exporting dogs to Canadian Rescue Organizations were identified.

## 4 HOW MANY DOGS DID THEY IMPORT? HOW MANY ARE UNDER 8 MONTHS OF AGE?

---

We have identified [6,189 dogs](#) imported into Canadian Rescue Organizations. [Of these, 210 were under the age of 8 months of age.](#)

### Dogs Entering Canada and Destined for Adoption or an Animal Welfare Organization

**Note: Rescued or stray dogs fall under the commercial dog category unless they are being imported as a personal pet.** If you are bringing a dog back to Canada to live with you or someone you know as a family pet, reset the application and select the pet category.

**Dogs less than eight months of age** entering Canada and destined for adoption or an animal welfare organization must come from a registered kennel. For more information on registered kennels, consult the [CFIA's Automated Import Reference System \(AIRS\)](#). In addition, these dogs require:

- rabies vaccination certificate
- a veterinary certificate of health
- a microchip or tattoo
- an import permit

Dogs under eight months of age that do not come from a registered kennel (i.e. stray dogs) are not permitted to enter the country under the commercial category.

Individuals may import a stray dog under eight months of age provided the animal is coming to Canada to live with them or someone they know as a family pet.

---

## 5 HOW MANY IMPORT PERMITS WERE ISSUED BY CFIA FOR DOGS UNDER 8 MONTHS OF AGE?

---

An Access to Information request was submitted to the Canadian Food Inspection Agency requesting the number of import permits issued, and how many under 8 month old dogs were covered by those permits. The response received was only of the number of import permits issued, for dogs under 8 months of age, by country of origin of the dog.

The response was [349 import permits were issued for dogs under 8 months of age.](#)

## 6 WHERE DID THE DOGS UNDER 8 MONTHS OF AGE ORIGINATE?

Country of Origin	# Imported by Rescues	# of Import Certificates Issued by CFIA
Anguilla	1	0
Bahamas	12	0
Dominican Republic	77	0
Egypt	16	0
Jamaica	8	0
Kosovo	1	0
Kuwait	1	0
Mexico	15	3
Republic of Korea	9	25
Romania	1	0
St. Maarten	4	
Thailand	1	0
USA	52	126
Unidentified/Unknown	12	2
<b>TOTAL</b>	<b>210</b>	<b>156</b>

As the Canadian Food Inspection Agency states “**Dogs under 8 months of age that do not come from a registered kennel (i.e. stray dogs) are not permitted to enter the country under the commercial category**”, it is safe to assume that all of the under 8 month old dogs imported by rescue organizations did not enter with a CFIA issued Import Certificate

### Dogs Entering Canada and Destined for Adoption or an Animal Welfare Organization

**Note: Rescued or stray dogs fall under the commercial dog category unless they are being imported as a personal pet.** If you are bringing a dog back to Canada to live with you or someone you know as a family pet, reset the application and select the pet category.

**Dogs less than eight months of age** entering Canada and destined for adoption or an animal welfare organization must come from a registered kennel. For more information on registered kennels, consult the CFIA's Automated Import Reference System (AIRS). In addition, these dogs require:

- rabies vaccination certificate
- a veterinary certificate of health
- a microchip or tattoo
- an import permit

Dogs under eight months of age that do not come from a registered kennel (i.e. stray dogs) are not permitted to enter the country under the commercial category.

Individuals may import a stray dog under eight months of age provided the animal is coming to Canada to live with them or someone they know as a family pet.

Thank you for bringing this forward to our attention. As I mentioned to you earlier, I do read each and every one of your e-mails.

**As you are aware,** the import conditions for dogs/puppies are put forth in Regulation, specifically in the Import Reference Document (which is a subset of the Health of Animals Regulations). These requirements are enforced by the Canadian Border Services Agency (CBSA) whose role is to visually inspect the animals for health and to determine whether an animal is a commercial or personal pet import. Any animals that do not appear healthy are referred to the CFIA. While some of animals may appear visually healthy, they may be harbouring diseases/pests/parasites. The only disease of pets that the CFIA is mandated to control is rabies; import restrictions cannot be put in place for diseases that are present (or status is unknown) in Canada and for which there are no control measures such as heartworm disease, coccidiosis and leishmaniasis.

Kind regards,

Dr. Connie Rajzman, DVM  
A/Senior Staff Veterinarian  
Animal Import/Export Division  
Canadian Food Inspection Agency  
Tel: (613) 773-7458 Fax: (613) 773-7575

<http://globalnews.ca/news/993027/rescued-puppies-from-mexico-caught-in-limbo-sit-on-death-row-in-calgary/>

## 7 WHERE DID THE RESCUES IMPORT DOGS FROM?

COUNTRY OF ORIGIN	QUANTITY	NS	NB	QC	ON	MB	SK	AB	BC	?
Albania	9				9					
Anguilla	1								1	
Bahamas	77				14				1	62
Brazil	1					1				
Costa Rica	1				1					
Cuba	1				1					
Czech Republic	1			1						
Dominican Republic	123	1		3	117			2		
Egypt	52			3	33			3	10	3
Greece	160				160					
Guatemala	1						1			
Iran	1				1					
Ireland	6				6					
Israel	4				4					
Jamaica	20				9			2	3	6
Republic of Korea	22				3		15		4	
Kosovo	13				13					
Kuwait	5								5	
Lebanon	19				19					
Malaysia	2								2	
Mexico	555			1	62			378	113	1
Morocco	1			1						
Romania	19				18				1	
Russia (Socchi)	4				4					
St. Maarten	13			4	9					
Serbia	1				1					
Taiwan	16				11		1		4	2
Thailand	3				2				1	
USA	5046	78	22	15	1225	110	35	873	2495	193
Unidentified	12				12					
<b>TOTAL</b>	<b>6189</b>	<b>79</b>	<b>22</b>	<b>28</b>	<b>1738</b>	<b>111</b>	<b>52</b>	<b>1258</b>	<b>2640</b>	<b>265</b>

NOTE 1: "?" foreign rescue merely stating animal went to Canada

NOTE 2: Socchi dogs discovered through discussion with rescue that knew of person that brought them in  
 \*\*\*\*SOURCE DATA IS AVAILABLE WITH ALL SUPPORTING DATA. SOURCE DATA WILL BE SUPPLIED IN MS-ACCESS DATABASE FORMAT\*\*\*\*

## 8 IS THERE A SHORTAGE OF DOGS WITHIN CANADA?

---

The Canadian Federation of Humane Societies (“CFHS”) released statistics for 2013 based on a voluntary survey of their membership. The survey was sent to 172 Humane Societies and SPCA’s within Canada; 90 surveys were completed, of which 62 respondents are members of CFHS.

(Reference: [http://cfhs.ca/athome/shelter\\_animal\\_statistics/](http://cfhs.ca/athome/shelter_animal_statistics/))

As stated in the report, referenced above, the survey does not include municipal animal services, private shelters, rescue and foster groups.

**8,000 dogs** were  **euthanized** by the respondent Humane Societies & SPCA’s

0.4% of the dogs are categorized as “died or lost” ~ 184 dogs

*However, in a poll conducted by Leger Marketing on behalf of the Association des Médecins Vétérinaires du Québec (AMVQ) reports that **500,000 dogs & cats were ‘euthanized’ in the Province of Quebec in 2013.***

(Reference <http://www.animal911.ca/half-a-million-unwanted-pets-euthanized-in-quebec-in-2013/>)

*Further information from Dr. Judith Sampson-French (of Dogs With No Names):*

*“Dr. Samson-French believes there could be **as many as a million unhoused dogs** on reserves across Canada. She estimates there are at least two semi-wild dogs for every home on a reserve.”* (Reference: <http://news.nationalpost.com/2013/02/02/volunteers-struggle-to-reduce-wild-dog-population-plaguing-native-reserves/>)

## 9 METHODS OF TRANSPORT

---

Organizations exist for the sole purpose of transporting dogs; the majority of these are ground transporters (USA). A mix of ‘for profit’ ground transport organizations and ‘volunteer’ ground transports exist.

Ground transports:

“For Profit” – a business

There are many ‘for profit’ ground transport organizations, in the US. These type of transports terminate within the US requiring the Canadian Rescue Organization to drive into the US to meet the incoming transport and bring the dogs back into Canada themselves.

Organized volunteers

Several organized volunteer ground transports operate in the USA with ‘runs’ which terminate in Canada. Other organized volunteer ground transports terminate within the US, close to a

border crossing, requiring the Canadian Rescues to drive into the US to meet the incoming transport and bring dogs back into Canada themselves (making it extremely difficult to identify).

- **Open Arms Transport** organizes weekly volunteer ground transports from Kentucky and Ohio into Ontario. In 2014, Open Arms transported **583 dogs** into Ontario.
- **Paws to the Rescue** organized a transport for **11 dogs** from South Carolina to Alberta
- **The Liberty Train** organizes regular transport to Windsor Ontario. In 2014, Liberty Train transported **104 dogs** from Louisiana, Georgia, Alabama, Tennessee, Texas into Ontario.
- **Transporters without Borders** organizes regular runs from New Jersey and New York into the Maritimes. In 2014, Transporters Without Borders transported **54 dogs** from Connecticut, Maine, New Jersey and New York to rescues in Nova Scotia and New Brunswick.
- **Kindred Hearts** transports dogs from California and Nevada to as far as Nova Scotia.

Other methods of ground transport

- Horse trailers (<http://www.calgarysun.com/2014/09/14/rollover-crash-near-olds-sends-kills-rescued-dogs-sends-volunteer-group-searching-for-others>)
- Mobile homes driven by Canadian Rescue Organization into USA and back
- Truckers

### Rollover crash reignites controversy over dog rescue traffic from U.S. to Canada

SEPTEMBER 16, 2014 BY MERRITT CLIFTON

EDMONTON—A September 13, 2014 rollover crash near Olds, Alberta that killed at least three dogs in a load of 30 has reignited debate over the practice of importing dogs from U.S. shelters into Canada.



### Air Transport

There are various types of air transport utilized to transport 'rescue dogs' into Canada. Retail commercial airline cargo is the most expensive option. In order to reduce the cost of transport, rescue organizations will pursue other means of air transport:

1. Solicitation of those already traveling on the route; referred to as 'accompanied'. It is much less expensive to fly an animal when it is 'accompanied' by a paying passenger. Solicitations for these 'flight companions' appear regularly on Facebook. There are many unsuspecting travelers who believe they are doing a good deed as they do not know the rules for the importation of puppies, destined to Animal Welfare Organizations, into Canada.
2. Solicitation of funds to pay for a person to fly return, same day, in order to 'accompany' animals back.
3. Various organizations, in the USA, offer free or low cost private flights for rescue animals. Wings of Rescue, based in California, is one such organization which has flown into Canada (Alberta). Pilots N Paws offers free flights for rescued animals only within US airspace (some Canadian



rescues will drive across the border to meet one of those flights and return to Canada with the dogs).

4. Reaching out to airline employees who have 'travel perks', or discounts.

**ABA - Anubis Bastet Adoptions For Egyptian Animals**  
 Shared their photo  
 January 31 at 8:50pm · Edited ·

**URGENT CALL:** Can you help? ABA needs flight parents from Cairo to New York, Southern California, Colorado and Portland. And we constantly need flight parents from Egypt to Canada - Vancouver, BC and Toronto, Ontario, very frequently. As well as flight parents to Brussels, Amsterdam or Paris. Please keep this in mind when you hear of people travelling to and from Egypt and spread the word!



ABA - Anubis Bastet Adoptions For Egyptian Animals  
 URGENT CALL: Can you help? ABA needs flight parents from Cairo to New York, Southern California, Colorado and Portland. And we constantly need flight parents fr...

See More

**Pamela Palmer**

Ok guys its crunch time!!!!!! We have pups and dogs that are looking to get to their forever homes! Westjet has a heat embargo that starts May 1st! ANYONE please share! We are looking for tourists who are coming to Cancun, returning to either Hamilton, Ontario, Toronto, Calgary, Victoria, Vancouver, Regina, Ottawa, Buffalo, Detroit flying on Westjet, or Air Transat ( I dont know forsure if they land in US airports, but just incase! Those two are close enough to the border haha) We handle everything! We will bring the dog or pup to the airport, cover all costs, provide all the paperwork and documentation... as well as have someone at the airport you land in to pick up the pup or dog. All we need you to do is claim them through customs! Please share, please help! If you know anyone coming to Cancun soon for vacation... ask them to please help us take a pup or dog to their final journey.. to their forever home!!!! Please contact me if you are able to help!!! 😊

**Set Dog Canada**  
 Wednesday, 2019 ·

All of the dogs that we've rescued off the streets, from the dog meat trade those that needed emergency medical care - they all need our help to get them to their new homes. We have a website need for flight volunteers and adopters. If you know of anyone traveling to Asia and back to Canada please let us know this with them. Please tell people about us who may be interested in adopting a dog. The more of us and networking - the more dogs we can save. We have Flight Volunteer Roles in French and English for any volunteers willing to help by distributing them. They can be delivered to Travel Agencies, Universities, Churches to raise students, newspapers, and much more. Please contact [Canadian@setdog.org](mailto:Canadian@setdog.org) foundation if you'd like to help us to help more dogs get homes. The need is urgent and you can make a difference.

**Looking for heroes? Become a Flight Volunteer**  
 WE NEED YOU!  
**From Thailand to Canada**  
 We are looking for heroes to help us rescue dogs from Thailand and bring them to Canada. If you are interested in becoming a flight volunteer, please contact us at [info@setdog.org](mailto:info@setdog.org)

**SPCA Puerto Vallarta** added 3 new photos to the album: **WINGS OF ANGELS**  
 1 hr ·

Meet our stars! Those who are willing to travel back to the US or Canada with one of our very lucky SPCA PV animals.

Travel with Animals.....Many folks vacation to Puerto Vallarta and during their stay.....a homeless cat or dog is found! What do you do? Take it home with you of course! Here are a few tips as to what steps should be taken to make sure your new family member receives the frequent flyer miles he/she so deserves. ITS EASY! Please consult with your airline as each one has different criteria.



**When Pits Fly Community**  
 Timeline About Photos Likes Videos

**About When Pits Fly**

<b>Page Info</b>	<b>PAGE INFO</b>
	<b>Short Description</b> Transporting dogs from shelters to the rescue is a key facet of this group, and we need your help to do it!
	<b>Long Description</b> PPBR works with many amazing shelter partners, helping us assess and choose the awesome pibbles to join our group. The dogs that have been chosen will be posted a week, or so in advance of the transport in an effort to raise funds to cover the transport costs.
	<b>Website</b> <a href="http://www.prairiepitbullrescue.com/">http://www.prairiepitbullrescue.com/</a>

**KEEP CALM AND**

**Travel Companions Needed Great to Go!**

Manassas, VA  
 These pups will all travel to Canada. All adoptions are from Prairie Pit Bull rescues.

Lincoln, VA  
 These pups will all travel to Canada. All adoptions are from Prairie Pit Bull rescues.

Photos from Diana Fortner's post in Dogs and Cats of the Dominican Republic

4:34:17 PM 2015-01-12

**Wings of Rescue** updated their cover photo.  
October 10, 2014 · Edited ·

ether with Thank Dog I Am Out Dog Rescue we saved 135 dogs in  
day!



Comment · Share · 385 20 24

**Wings of Rescue**  
Wings of Rescue will have a transport availa Monday, September 8th from Wichita, Kansas Calgary, Canada ICHN 870P aboard a Cess Mustang jet! We will have room for approx small dogs although we can transport dogs 4 pounds. Please contact em@wingsofrescue.com for more information. Please share with your res partners! Thank you!

Like · Comment · Share

91 people like this

Linda "Nana" Carel is leaving from Kansas. They have plenty that leave for just have to ask. Their prices are re reasonable and they have saved about 3 animals in. I think only 2 years! Storage is saving many lives. The trick is to get (homeless pets) to a reputable rescue many adoptions in other parts of the are are truly dedicated to saving lives.

Adoption Event Flight For Life by ThankD.

HOME CONTACT US DOG PHOTOS Find us on facebook

Flight for Life Dog Adoption event Sat. Oct 4th

Every day, thousands of adoptable dogs are euthanized in shelters in the USA. Thank Dog I am Out is a local BC rescue driven to saving lives of those dogs, with a focus on those at risk in California. On SAT, OCTOBER 4TH / 12 NOON - 5PM we are partnering with WINGS OF RESCUE to pilot 5 planes and 100 RESCUE DOGS into Bellingham Airport USA for a One-Day Adoption Event. All the dogs (+ 30 pounds & under) will arrive micro-chipped, with current rabies and an International Health Certificate, up to date on all shots and spayed/neutered (puppies under 6 mo. will be given a coupon for medical updates).

**DO YOUR PART TO HELP:  
PLEASE APPLY TO ADOPT NOW**

2:24:10 PM 2015-01-07

**When Pits Fly**  
January 3, 2014 ·

So many likes! Awesome. The way When Pits Fly works is we have a specific date in mind for a flight, mostly based on time off for the volunteer willing to fly. Once we have a date, we contact the shelter and get their recommendations on potential dogs to come into our program, based on how long the dog has been 'incarcerated', we like to pull dogs that have been there for a long time, poor kids.

Then they go thru a checklist of things such as any health conditions that may need to be addressed, they get taken out to the play yards a few times to see how they like other dogs, they even get to spend time in the offices of the staff to see how they like all sorts of people, sometimes a cat wanders in, and other dogs are often invited to the office parties as well.

Its when we have three dogs picked out, that we will post their pictures on this page. If you would like to donate toward the cost of the transport, you will private message us or simply comment the amount you would like to give to sponsor the dog.

When the dog has left the shelter, a 'freedom' picture will be posted at which time you will have to pay your pledge by paypal 😊 The amount we would like to raise changes a bit based on flight costs, but this is the average cost for three dogs: \$450 for the flight, \$100 in gas to and from the airport, \$85 to ship the crates down to San Diego, \$157.50 for the three dogs' flights up to Calgary, and about \$200 in brokerage fees...oh, and the insane fees for parking at the airport! lol. The way its worked and we've been able to do the flights since June, is we tried to raise \$200 - \$250 per dog. Sometimes we were able to get it all raised, other times, we didn't, but a dog was never left behind, it all works itself out.

\*\*This is all based on when we take dogs from San Diego. We also do alot of ground transport which we would also be looking for sponsors/pledgers for, and the cost will be published separately at those times\*\*

\*\*The dogs pictured for the flights will not be available for adoption off this page. They need time to destress, adjust to our weather 😊 and then they will be made available on our website and main facebook page. Sponsors cannot reserve a dog thru this page\*\*

Questions?

Like · Comment · Share · 14 3

11:52:16 AM 2015-02-08

**Rescue Express Transport**  
January 15 at 6:18pm ·

Our first transport will be on February 14th. From LA and Palmdale boarding facilities. We will drop animals anywhere along the 5 highway and will go as far as Vancouver Canada if needed. We have room for 125 dogs.

Like · Comment · Share · 13 3

**Rescue Express Transport** updated their cover photo.  
January 15 at 5:07pm ·





## Analysis of Modes of Transport

Mode of Transport	# of Dogs Transported	Percentage of Total
Organized Volunteer Ground	763	12.32%
Other ground transport	2,691	43.48%
Air (Plane)	2,735	44.19%
<b>Total</b>	<b>6,189</b>	<b>100.00%</b>

# 10 REASONS FOR IMPORTING DOGS

We have noted a huge growth in the unregulated 'animal rescue' sector, in Canada, over the past year or so. In many instances, an animal rescue is started by simply opening a Facebook page proclaiming one is a rescue organization. Canadian Shelters (Humane Societies and SPCA's) tend to 'screen' rescue organizations to ensure the dogs are going to an established organization with the resources necessary to properly care for and place the dog. As many of the foreign shelters & pounds are desperate to save as many as possible ("Live Release Rate"), it appears these foreign shelters & pounds are willing to take the risk of sending dogs to these new rescues.

In some cases, Canadian Rescue Organizations have been placed on "DO NOT RESCUE" (DNR) lists; the DNR lists are to warn others that the rescue is not reputable (though there does not appear to be one specific document which defines the attributes of a reputable rescue). These rescues are unable to 'pull' dogs from local / Canadian pounds and shelters.

Date: Tue, 5 Nov 2013 08:35:40 -0500  
Subject: Refuge  
From: [raines75@...](mailto:raines75@...)  
To: [animal@...](mailto:animal@...)


We continue to receive messages to our page about her. I thought it may be best to just send to you in hopes you can find out the legitimacy and have current conditions checked...{  
Thanks!

- URGENT: This is regarding a number of dogs who have recently been released or are about to be released from the Lancaster County Shelter in either SC or VA. The names of the dogs are Floyd, Lola, Cappy, Soccer and Chauncy. The dogs are supposed to be picked up and transported to Refuge St. Chatques located in Joliette, Quebec, Canada


WARNING: THE WOMAN WHO RUNS REFUGE ST. CHATQUES IS A SERIOUS HOARDER. THIS IS MY PERSONAL EXPERIENCE.

Laurence Perron runs a "refuge" by the name of Refuge St. Chatques, in Joliette, Quebec, Canada. She is known by many in the Quebec & Ontario rescue community as a hoarder. In December 2012, she had 50 dogs housed in a decrepit barn. I SAW THE BARN MYSELF AND THE CONDITIONS HER ANIMALS LIVED IN WERE BEYOND HORRENDOUS. Two years prior, she had 50 dogs housed in one location and 50 cats housed in another location, at least one or both of those locations had no heat or lighting. The animals were housed in two different municipalities and she would drive back and forth to look after them.

I will never forget the conditions of the barn where those dogs were kept. The front of the barn had huge holes in it which, essentially, provided little protection from the elements. There was no heating or lighting. Half of the barn was recessed and was pitch black, even in the daylight. The concrete floor was covered with garbage and old feces was ground into the concrete. The air was musty from a lack of air circulation and the stench of feces and garbage was overwhelming. The cages I saw were small, and had dried in feces caked in between the

 **UFA: United Fosters of America** shared Amy Joy Roman's note.  
June 20, 2011 · 🌐

A woman possibly named Rita Mueller who calls herself Scooby's Doghouse and Rescue in Canada has thousands of fb friends, tens of thousands of posts, has had hundreds of dogs sent to her from the US and has collected many Chipins, yet NO ONE seems to know her address or any other info. Last night she stated that 6 dogs were siezed and one of those dogs is allegedly Braveheart, who was sent from Miami. -Nomie

 Amy Joy Roman

**SCOOBY'S DOG HOUSE.. PRIVATE PM....NOW NOT SO PRIVATE. STOP SHIPPING ANIMAL'S OUT OF STATE!**

SCOOBY'S IS SELLING BRAVEHEART A BAIT DOG FROM MIAMI..BARBIEANDCAROL PUT THIS POOR BOY IN CARGO TO CANANDA! IS THIS RESPONSIBLE RESCUE?? ON CANANDA'S PETFINDER FOR 400.00\$\$\$\$\$\$\$\$\$\$\$\$\$ SO MUCH FOR BRAVEHEART HAVING A WONDERFUL HOME WAITING FOR HIM! BRAVEHEART ON PETFINDER CANADA STYLE! 400.00\$\$\$\$\$

Quite a few Canadian Rescue Organizations are switching to importing dogs due to the high veterinarian fees / costs associated with local (Canadian) dogs.



### Navan Animal Rescue Corporation (NARC)

Changes at NARC in 2015

Due to financial restraints, we have decided to change the rescue to more of a foster home based and also move to the garage once it is properly renovated! All this to hopefully be able to rent the modular home in order to bring in funds to help maintain NARC. My New Years resolution – NARC has to stand on it's own two feet and I no longer can pay for the expensive hydro bills monthly, gas, veterinary costs, wood for wood stove, website maintenance, straw for dog houses, maintenance of modular home, Electricians, Plumbers, Insurance, Strongid-T, Multi-Advantage monthly, phone, internet and the list goes on and on... The main reason of course is that University is starting in September for my daughter and my personal finances have to be moved in that direction! Our veterinary costs keep going up a few times a year and are no longer affordable unless we change our adoption fees which is not something we want! We are also looking into bringing dogs in from other locations/countries where veterinary fees are way less expensive so we don't have to worry about changing our adoption fees. Many issues at hand for the new year! Right now, we haven't taken dogs from pounds in our areas due to the high veterinary costs here in Ottawa, usually surpassing our adoption fees! We can only take in small to medium sized dogs as our re-location will not allow larger breeds. Lots of new things happening but let's keep an open mind and get through these changes together!

The US-style cross-posting of dogs in shelters with individuals pledging funds to help cover the 'pull' fee, basic veterinarian costs etc. The dogs with 'full sponsorship' (usually \$300.00 - \$350.00) are much more appealing to a rescue as much of the 'upfront' expense is already covered. In essence, the rescue organization is getting a 'free' (or very close to free) dog to adopt out.



Elizabeth Hanson shared Urgent Dogs of Columbus County Animal Shelter, NC's photo.

January 30 at 12:05am

Is there really no one for this wonderful boy? He DIES by heart stick at 7 a.m. TOMORROW Friday morning without rescue/foster commitment. FULLY FUNDED at \$300 in sponsorship. Please share to save his life. CCAC in Whiteville, NC.



Urgent Dogs of Columbus County Animal Shelter, NC

Canadian Food Inspection Agency modified import regulations, pertaining to dogs, effective November 1<sup>st</sup>, 2013.

November 1st, 2013 introduced a modification to the import regulations, from CFIA, for dogs. This modification discontinued the special import policy under commercial imports to assist animal welfare organizations that were rescuing displaced dogs from the US in the wake of Hurricane Katrina. However, at the same time the “Automated Import Reference System” (“AIRS”) was updated to allow the import of dogs (over 8 months of age) from anywhere in the world; this was not the case prior to November 1st, 2013 and it is suspected this may be an inadvertent error while updating AIRS.

It would appear CBSA & CFIA may not follow their own rules, these pups were eventually allowed into the country:

***“Lisa Ryall and her husband found six stray puppies on the streets of a village north of Puerto Vallarta which were in danger of being culled.***

***Desperate to help the young animals, Lisa brought them back to Canada last week, hoping they could be adopted.”***

<http://globalnews.ca/news/993027/rescued-puppies-from-mexico-caught-in-limbo-sit-on-death-row-in-calgary/>

<http://globalnews.ca/news/995894/fate-of-rescued-puppies-from-mexico-doesnt-look-promising/>

<http://globalnews.ca/news/999263/possible-resolution-for-mexico-puppies-stuck-in-legal-limbo/>

Appendix 2: Reasons and means of canine importation into Canada

Reason / means	Example	Pros	Cons
Personal pet re-entering with owner after short-term trip	Dog returning with Canadian resident vacationing in southern US over the winter	Dog ownership is clear, dog likely receives some veterinary care in order to obtain rabies certificate to cross the border	Owners may not be aware of disease risks in other regions because the dog doesn't "live" there, and may not see a local veterinarian. May increase likelihood of pathogen carriage/infection on entry.
Personal pet entering with owner for first time or re-entering after long-term trip	Family moving to Canada for work, bring family dog	Dog ownership is clear	Longer duration or wider variety of potential exposures to diseases in country/region of origin. May increase likelihood of pathogen carriage/infection on entry.
Recently adopted pet entering with owner who is either entering or re-entering	Vacationer to the Caribbean returning with an adopted street dog	Dog ownership is clear, well-intentioned owner more likely to provide care if dog is/becomes ill	Animal history is typically unknown, dog may have only received cursory veterinary care prior to importation to obtain rabies certificate, dog may be too young for rabies vaccination, vaccination in some countries may be less reliable (e.g. poor vaccine quality, cold chain not maintained).
Rescue animal being imported under commercial dog rules	Group of dogs arriving with an individual working for a rescue organization	Import permit, microchip or tattoo, and veterinary health certificate required in addition to rabies vaccination	Dog's final owner is unknown, adoptability may be unknown, animal history is typically unknown. Other risks as above, plus typically originating from high-risk facility or area (e.g. crowded, suboptimal care/sanitation)

Reason / means	Example	Pros	Cons
Rescue animal being imported under guise of personal pet	Lead rescue individual travels to a foreign country and returns with several dogs at once, claiming them all as personal pets when in fact hoping to adopt them out once they're in the country	None. Worst scenario.	Dog's final owner is unknown, adoptability may be unknown, animal history is typically unknown, no entry requirements beyond a rabies vaccination. Other risks as above.
Rescue animal being imported on behalf of owner/adopter who has never seen the dog	Dog adopted via an internet campaign set up by a rescue organization, brought in by third party to be delivered to new owner in Canada	Well-intentioned owner more likely to provide care if dog is/becomes ill, assuming adoption goes through	Unclear how to verify ownership, owner may decide not to adopt dog in the end, either before or after seeing it. Other risks as above.
Personal pet entering for veterinary care	Dog from northern US state requiring a highly specialized surgical procedure for which the nearest expertise and equipment is across the border at a Canadian referral hospital	Primarily done for referral/tertiary care of personal pets, not typically sought for rescue/unadopted animals, dog ownership is clear, being taken directly to a veterinary facility so likely to have limited contact with local dogs.	Inherently animals will not be "healthy". Personnel at referral centres near the border or near major ports of entry need to be particularly aware of risks of imported diseases.

Appendix 3: Summary of veterinary certificate requirements for importation of unvaccinated dogs to Canada from a rabies-free country ([web source](#))

A veterinary certificate is required for importation of all dogs greater than 3 months of age to Canada that are not immunized against rabies but are arriving from [a country recognized by Canada as rabies-free](#). The veterinary certificate must:

- be written in English or French;
- be issued and signed by a licensed veterinarian;
- identify the animal (breed, sex, colour, and weight);
- state that the animal has been in the exporting country since birth or for at least six months immediately preceding shipment to Canada; and
- be accompanied by documentation from a competent government authority, stating that rabies has not occurred in the country of origin for at least six months immediately preceding the animal's shipment to Canada.

A competent government authority refers to a veterinary agency or other government agency that manages a country's animal health and welfare situation, as well as handles the responsibility of veterinary certification for the purposes of international trade. The document can be either:

- a letter issued on the competent government authority's letterhead, which must be dated, stamped and signed by an official of the competent government authority in the country of origin; or
- a letter by the licensed veterinarian who issued the certificate, which must be endorsed by the competent government authority.

Appendix 4: Canine import permit application process ([web source](#))

- Contact the CFIA [Animal Health Area Office](#) for the applicable province 30 days before the dog is imported. Allow extra time if the original of the permit must be sent outside Canada.
- The [Application for Permit to Import \(CFIA/ACIA 5083\)](#) is completed by the importer.
- The completed application is faxed or mailed with payment to CFIA, [Centre of Administration \(CoA\)](#).
- Once approved, the original of the import permit is sent to the importer to be presented, along with the animal, at the port of entry.



Appendix 5: Summary of veterinary health certificate requirements for importation of dogs to Canada ([web source](#))

A veterinary certificate of health is required for importation of commercial dogs less than 8 months of age to Canada. The veterinary certificate of health must:

- be written in English or French;
- be issued and signed by the licensed veterinarian who performed the examination;
- identify the animal (breed, sex, colour, and weight);
- specify the date and time of the examination;
- have the name and signature of the licensed veterinarian;
- state that the veterinarian is satisfied that the animal:
  - is not less than eight (8) weeks of age at the time of the examination;
  - is free of any clinical evidence of disease;
  - was vaccinated, not younger than six (6) weeks of age, for distemper, hepatitis, parvovirus, and parainfluenza virus;
  - can be transported to Canada without undue suffering due to infirmity, illness, injury, fatigue, or any other causes;

All information must be recorded legibly in the veterinarian's handwriting. The dog must be imported into Canada 48 hours or less after the examination.

The European Union pet passport is not an acceptable alternative to the certificate of health.

Appendix 6: Comparison of selected canine importation requirements to Canada, US, UK/EU, and New Zealand.

	Canada	United States	European Union	New Zealand
Primary reference:	<a href="http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/eng/1326600389775/1326600500578">http://www.inspection.gc.ca/animals/terrestrial-animals/imports/policies/live-animals/pets/eng/1326600389775/1326600500578</a>	<a href="http://www.cdc.gov/importation/bringing-an-animal-into-the-united-states/index.html">http://www.cdc.gov/importation/bringing-an-animal-into-the-united-states/index.html</a>	<a href="http://ec.europa.eu/food/animal/liveanimals/pets/index_en.htm">http://ec.europa.eu/food/animal/liveanimals/pets/index_en.htm</a>	<a href="https://www.mpi.govt.nz/document-vault/1574">https://www.mpi.govt.nz/document-vault/1574</a> <a href="https://www.mpi.govt.nz/document-vault/1575">https://www.mpi.govt.nz/document-vault/1575</a>
Animal may be denied entry if it appears sick with a communicable disease	X	X		
Rabies vaccination not required if coming from a country recognized as rabies-free	X	X		X
Rabies titre requirement			X	X
Rabies titre option instead of vaccine	X			
Permanent identification required (microchip or tattoo)		X	X	X
Routine post-arrival quarantine and inspection				X
Special requirements for the following diseases:				
Babesiosis				X
Brucella canis				X
Cestodes & nematodes (any)				X
Echinococcus multilocularis			X	
Fleas				X
Heartworm				X
Leptospirosis				X
Rabies	X	X	X	X
Screwworm		X		
Ticks				X
Transmissible venereal tumor				X

Appendix 7:

**Table 1: Bacterial, protozoal and viral diseases of concern with regard to canine importation to Canada**

Disease name	Canine brucellosis	Leishmaniasis	Canine influenza	Rabies
Pathogen name	<i>Brucella canis</i>	<i>Leishmania infantum</i> , <i>L. donovani</i> , <i>L. chagasi</i> , <i>L. mexicana</i> (US), <i>L. braziliensis</i> (Latin America)	Canine influenza virus (H3N8, H3N2 types)	Rabies virus (wildlife and canine variants)
Federal status	Only reportable in livestock	None	None	Reportable
Clinical disease:				
Companion animals	Reproductive failure, abortion, stillbirths, epididymitis, orchitis; in spayed/neutered animals, ocular disease and discospondylitis are still possible Transmitted in semen and uterine/vaginal fluids via contact with broken skin or mucous membranes	Often subclinical but can be fatal; highly variable multisystemic disease, occurs in cutaneous and visceral forms, can affect integumentary, ocular, renal, GI and musculoskeletal systems, as well as causing weight loss, exercise intolerance and lethargy. Incubation months to years. Cats, horses and rarely other mammals can also be infected. Infected animals remain lifelong reservoirs for vectors for life, no definitive curative treatment.	20-25% subclinical, fever cough, lethargy inappetence for several days, though cough may persist up to 3 weeks, some cases may progress to more severe pneumonia complicated by secondary bacterial infection. Virus shedding highest prior to clinical disease (incubation 2-4 days), and may persist for 7-10 days. Primarily transmitted by direct contact, but fomites also a risk. H3N2 has also been reported in cats	Severe acute progressive neurological disease, >99% mortality. Furious and/or dumb form.
Humans	Usually mild, but may be underdiagnosed; typically non-specific flu-like	Ranges from self-limiting to fatal, immunosuppression and	Infection of humans with canine influenza virus has not been reported	Severe acute progressive neurological disease, >99% mortality

Disease name	Canine brucellosis	Leishmaniasis	Canine influenza	Rabies
	symptoms. In a small percentage of cases, symptoms may be chronic or recurrent, including fever, arthritis, fatigue, endocarditis, orchitis or neurological signs (in up to 5% of cases).	malnutrition are important risk factors; visceral and cutaneous forms as for dogs, potential for long dormancy periods. Treatment typically prolonged and complicated		
Vectors	NA	Sandflies ( <i>Lutzomyia</i> spp, <i>Phlebotomus</i> spp, others) ; currently no known competent vectors in Canada	NA	NA
Other necessary hosts	NA	Theoretically can infect any mammalian host, but typically life cycle maintained with small rodents (cutaneous) or wild canids (visceral).	NA	Virus is maintained in specific reservoir species that vary by region (bats, skunks, foxes, raccoons, dogs) with occasional spillover into other mammals
Relative risk				
Public health	Low for general public handling spayed/neutered dogs, higher for individuals involved in dog breeding (breeders, veterinarians), and for immunocompromised individuals (e.g. HIV patients) who are more prone to infection and complications thereof.	Currently low, as long as there is no competent vector. Direct transmission between dogs and humans has not been reported, but transmission via bites or needle sticks (blood exposure) is a theoretical risk.	Low. Viral sequencing found no evidence for increased potential for human infection in H3N2, risk similar for H3N8. Potential for reassortment into a strain that could infect humans	High. Generally few people exposed but consequences are severe and post-exposure treatment is expensive. Higher numbers of people may be exposed in the case of young animals (e.g. litter of puppies/kittens)
Domestic animals	Low unless involved in dog	Direct transmission	Moderate. Highly	Moderate. Risk of spread

Disease name	Canine brucellosis	Leishmaniasis	Canine influenza	Rabies
	breeding. Testing of mating pairs can effectively eliminate the risk.	between dogs suspected (vertically and via contact with blood/secretions horizontally), therefore dogs in high-density housing situations could potentially be at increased risk, but overall risk remains low while there is no competent vector.	infectious with direct contact and dogs may shed virus without showing clinical signs. Most disease is mild but can be severe in some cases. Vaccine currently available only for H3N8 subtype. Potential to persist in shelters with high population turnover, but less likely to persist in more stable community groups once immunity develops.	is limited because disease rapidly becomes clinical followed shortly by death, primary risk is exposure of people to rabid domestic animals. Vaccination coverage in domestic animals varies widely by region.
Native wildlife	Unknown. Wild canids are susceptible and can sometimes interbreed with domestic dogs which could spread infection. Risk of establishing endemic disease in wildlife populations is unknown.	Currently low, as long as there is no competent vector. If such a vector did emerge, wildlife (i.e. wild canids) could quickly become a reservoir of disease, making eradication extremely difficult.	Low. Most wild canids are too dispersed to maintain circulation of the virus in the population. Infectivity to wild canids or other species is unknown, but if similar to dogs would result in low mortality and population would likely recover.	Very low risk of introduction of a strain through a domestic animal that would become established in local wildlife
High-risk sources:				
Other countries	Worldwide distribution, US mid-west higher risk?	Mediterranean basin, South America (Brazil), Middle East, Mexico, USA (TX), foxhounds from US kennels (east coast)	Varies. H3N2 currently Korea, US mid-west (Illinois); H3N8 causes periodic outbreaks in many US states, originated in Florida in 2008	Many parts of USA South & Central America, developing countries in Africa and Asia (especially India)
Regions of Canada	Rare in Canada, suspect	Rare in Canada, primarily	Has not been reported in	Northern / arctic regions

Disease name	Canine brucellosis	Leishmaniasis	Canine influenza	Rabies
	primarily imported cases, but not reportable in companion animals therefore difficult to gauge	imported cases	Canada	
Additional notes	Can take up to 8-12 weeks for an infected dog to test positive. Risk of transmission greatly reduced in spayed/neutered dogs.	9-10% seroprevalence in US Foxhounds	Most commonly diagnosed by serology (2-3 weeks), possibly PCR early in illness. Could commonly be misdiagnosed as “kennel cough” or part of canine infectious respiratory disease complex (CIRDC)	Incubation period up to 6 months in companion animals

**Table 2: Parasitic diseases of concern with regard to canine importation to Canada**

Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
Pathogen name	<i>Echinococcus multilocularis</i>	<i>Dirofilaria immitis</i>	<i>Crenosoma vulpis</i> , <i>Angiostrongylus vasorum</i> , <i>Eucoleus</i> spp.	<i>Cochliomyia hominivorax</i> , <i>Chrysomya bezziana</i>	<i>Babesia</i> spp. <i>Borrelia burgdorferi</i> <i>Ehrlichia</i> spp. <i>Anaplasma</i> spp. <i>Rickettsia rickettsii</i>
Federal status	Annually notifiable	None	None	Immediately notifiable	None
Clinical disease:					
Companion animals	Typically inapparent intestinal tapeworm infection in dogs, but 4 cases of alveolar disease have been reported in dogs in Ontario, and cases have been detected in Alberta and British Columbia as well. Younger animals tend to be more heavily infected than older animals.	Animals with low worm burdens may be subclinical, larger burdens can lead to exercise intolerance and ultimately cardiovascular compromise and death. Treatment is also very aggressive and risky for the animal.	Range from inapparent infection, to mild/persistent cough sometimes associated with exercise, to severe hemorrhagic / respiratory disease	Eggs laid by adult flies on moist skin or near the edge of a wound. Larvae hatch and will consume/destroy healthy tissue, creating a wound or increasing the severity of an existing wound.	<i>Babesia</i> : fever and mild to severe anemia (possibly fatal); <i>Borellia</i> : mostly subclinical, polyarthritis and shifting lameness; RMSF: vague non-specific signs associated with vasculitis; <i>Ehrlichia/Anaplasma</i> : mostly subclinical, but non-specific signs, neuro dz, TCP, ocular lesions, polyarthritis reported
Humans	Insidious growth of budding cystic structures that spread like a malignancy and create space-occupying lesions	Infection is rare and typically subclinical, but radiographic lesions can be difficult to differentiate from neoplasia. If signs	Infection is rare ( <i>E. aerophilus</i> )	Identical to companion animals. Will infest any species, including cold-blooded animals.	<i>Borellia</i> : (erythema migrans to flu-like illness to recurrent arthritis, neuro dz, myocarditis); RMSF fever, rash, severe

Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
	leading to organ dysfunction. Other species of Echinococcus cause more discrete cystic lesions	occur, similar to dogs but very mild.			headache; <i>Ehrlichia/Anaplasma</i> : monocytic or granulocytic ehrlichiosis (canine <i>Babesia</i> not considered zoonotic)
Vectors	NA	Mosquitoes	NA	NA	Various. <i>Rhipicephalus sanguineus</i> (brown dog tick)(life cycle completed on dogs) <i>Ixodes scapularis</i> (deer tick) <i>Ixodes pacificus</i> (Western blacklegged tick) <i>Amblyomma americanum</i> (lone star tick) <i>Dermacentor variabilis</i> (American dog tick) <i>Dermacentor andersoni</i> (Rocky Mountain wood tick)
Other necessary hosts	Natural life cycle between wild canids (e.g. foxes) and small mammals (e.g. rodents). Larger herbivores can also be infected when grazing	NA	Frogs ( <i>Ang. vasorum</i> ) Snails ( <i>C. vulpis</i> ) None ( <i>Eucoleus</i> spp.)	NA	Various. Canadian wildlife could provide ample intermediate and definitive hosts for most of these diseases (rodents, deer, canids) if the tick populations



Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
	pasture contaminated by infected canid feces (especially sheep for <i>E. multilocularis</i> , caribou and moose for <i>E. granulosus</i> ). Wildlife species in Canada are almost certainly susceptible				are allowed/able to expand north of the US border
Relative risk					
Public health	High. Generally few people exposed but consequences are severe and post-exposure treatment is expensive. Higher numbers of people may be exposed if environmental contamination allowed to build up due to infected domestic and/or wild canids.	Negligible. Even in highly endemic areas disease in people is rare and mild.	Negligible. Rare reports of human <i>E. aerophilus</i> infection in endemic regions.	Low. Humans are susceptible but infection is relatively easily treated.	Low risk of exposure from imported ticks as they cannot complete their life cycle on a dog/within a household ( <i>R. sanguineus</i> excepted), but could be exposed during improper removal of an infected tick. Direct transmission from dogs is not reported, but theoretical risk from bites or if handling blood or tissues from an infected dog (?)
Domestic animals	Low. Infection is generally subclinical in definitive hosts	High risk to dogs although some percentage of the	Low to moderate. Most infections are inapparent or may	Moderate. Can cause significant morbidity and even	Low. Most infections are subclinical. Low risk of dog-dog

Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
	(dogs) unless large numbers of eggs ingested which could lead to cystic disease (4 reported cases in Ontario in last 5? years)). Potentially could lead to clinical problems as well as carcass condemnation in livestock if parasite becomes widespread.	domestic population is protected by use of routine prophylactics that also treat other seasonal parasites (intestinal worms, fleas, mites); low risk to other species (cats)	only cause a mild cough. Infection with <i>Ang. vasorum</i> can cause significant respiratory disease and coagulopathy, as well as disease due to aberrant larval migration	mortality in livestock if the fly becomes established locally. Pets are equally susceptible. Relatively easy to treat if caught early but can cause significant damage in short time frame	transmission (see public health risk), dogs are dead-end hosts for most of these microbes (unlikely to infect additional ticks); adventitial ticks from birds are an equal risk
Native wildlife	Low. Sylvatic cycles exist and infected animals are typically asymptomatic, though large, aggressive cysts can cause clinical disease in intermediate hosts as they do in humans	Evidence that there is already a wildlife reservoir (coyotes) in some areas, potential high risk of spread to other wild canids as these animals do not receive prophylactic treatment	Clinical risk to wildlife is low to moderate, primary risk is establishment of a wildlife reservoir (e.g. frogs, slugs) posing a risk of infection to domestic animals. Morbidity and mortality in wildlife in endemic areas is not high.	Moderate to high. All species susceptible and even healthy animals can be affected	Low, as for dogs. Expansion of tick ranges occurs due to climate change, and is unlikely to be the result of periodic introduction of limited numbers of these ticks on dogs, most of which already occur in some parts of Canada.
High-risk sources:					
Other countries	China Also increasing in Europe with rising fox populations due to successful rabies vaccination campaigns	Mississippi basin	???	South America, Caribbean	Tropical countries especially where ticks are common and tick-borne disease in dogs is poorly characterized; <i>Babesia</i> common in southern

Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
					Europe/Mediterranean basin
Regions of Canada	Ontario? BC? Parts of Alberta		Maritimes	NA	
Additional notes	<p>Suspect parasite may already be present in wildlife population in Ontario based on occurrence of 4 cases of alveolar disease in dogs.</p> <p>Eggs can survive in environment for months in cool, wet weather.</p> <p>Sensitivity and specificity of fecal floatation is unknown, and <i>Echinococcus</i> eggs cannot be differentiated from <i>Taenia</i> eggs using light microscopy. However, treatment of intestinal infestation is relatively simple and widely available. Deworming of wild and stray definitive</p>	<p>Diseases involving vector transmission (mosquitoes) and that can establish a wildlife reservoir (wild canids) are extremely difficult to eradicate</p>	<p>Endemic in wildlife in Atlantic Canada, geographic range expanding</p> <p>Routine deworming or heartworm prophylaxis is not effective against lungworms</p>	<p>Unknown (unlikely?) whether flies could overwinter in Canadian climate, thus any outbreak would be seasonally limited. Could have trade implications with other countries. Control in southern US and Mexico using release of sterile male flies has been very successful in eradicating screwworm from these areas, but was also expensive</p>	<p>Issues include dogs as source of imported ticks and source of infection for resident ticks; direct transmission from dogs to other animals or people is not a concern. Adventitial ticks on migratory birds would be another source of "imported" ticks, but these are of limited risk in terms of establishing new tick populations. Dogs are dead-end hosts for most of these pathogens and would not be a source of infection for other ticks (<i>Babesia</i> excepted). Tick ranges are expanding northward with ongoing climate change/global</p>

Disease name	Alveolar Echinococcosis	Canine heartworm	Canine lungworm	Screwworm	Tick-borne diseases
	hosts with anthelmintic baits has been effective in some countries (e.g., Japan).				warming. Diseases involving vector transmission (mosquitoes) and that can establish a wildlife reservoir (wild canids) are extremely difficult to eradicate
Potential border control measures	Require all dogs being imported to Canada to be treated for cestodes (praziquantel) prior to arrival	Require all dogs to be tested once before and once after importation	Imidacloprid treatment before or after importation	Inspection on arrival, recommendation for treatment before or after arrival if coming from non-free company	Inspection on arrival Recommendation for tick treatment before or after arrival Serum testing not relevant as does not differentiate exposure from infection

## Useful References:

Tick distribution maps (US): [http://www.cdc.gov/ticks/geographic\\_distribution.html](http://www.cdc.gov/ticks/geographic_distribution.html)

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