Canadian Food Inspection Agency
Agence canadienne d'inspection des aliments

Proposed Risk Management Strategy for EIA Control in Canada

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1.0 Summary

Equine Infectious Anemia (EIA) is a persistent and incurable viral disease of equines (i.e. horses, donkeys, mules, zebras) that has been found nearly worldwide. It is transmitted almost exclusively through blood or blood products and infected equines are the source of all new infections. Although most affected equines appear to have few clinical consequences, some forms of EIA can be associated with high morbidity and mortality. Accurate and simple live animal laboratory tests exist but there is no available vaccine or treatment for the disease. As an OIE listed disease, a requirement for international trade or movement of equines is proof of an individual animal test with negative results. Many countries also have control programs based on serological testing.

EIA became a reportable disease in Canada in 1971 and there has been some form of national disease control program since 1972. In response to an industry request, the Canadian Food Inspection Agency (CFIA) developed the current EIA program in 1998 as an approach the majority of horse owners would support. The program was developed in conjunction with industry, participation is voluntary, and industry supports its delivery by way of partial cost-recovery. The program was based on internationally recognized disease control standards, science of the disease, knowledge of the disease situation in Canada, and available diagnostic methods at that time.

Canada's current approach to EIA control faces some notable challenges. Upon implementation, considerable progress was seen in participation in EIA testing and the reduction in positive cases in eastern Canada. However, the program appears to have had limited impact in western Canada where the amount of surveillance testing is relatively low and detection of disease continues. As a result, a significant amount of federal resources are being spent and little benefit realized with the ongoing detection and destruction of infected horses in the same geographic areas or in the same populations/sectors. It is thought that a main contributor to the persistence of EIA in western Canada is the presence of several untested populations (potential disease reservoirs). These untested animals include some owned, semi-feral and feral equines. This is in contrast to the situation in eastern Canada where the majority of surveillance testing has occurred and positive cases are rarely detected.

Redesigning the program provides an opportunity for the CFIA and stakeholders to work together to develop one which will better address the current EIA situation in Canada while being mindful that federal involvement should be restricted to value added roles and responsibilities that the CFIA can uniquely provide. Acknowledgement that federal resources are limited will also be of importance. One control tool that the CFIA is in a unique position to offer is zoning of Canada for a disease. Zoning was raised with a small group of equine industry stakeholders and they were given an early opportunity to provide feedback on it and other possible options.

This document outlines a strategy which has the potential to effectively address the issues highlighted in the significant feedback received including protecting the progress made to date in eastern Canada, as well as, providing an appropriate level of disease control for owned horses in western Canada. Canadian equine stakeholders will have an opportunity to provide comments on the proposed strategy as a

potential approach to EIA control in Canada.

2.0 Purpose

The purpose of this Proposed Risk Management Strategy (PRMS) is to provide a summary of the disease, current program challenges, feedback from early consultations with the Equine Biosecurity Advisory Committee (EBAC) on a range of possible program redesign options, and a potential future strategy. The CFIA is using this PRMS as a tool for consulting with Canadian equine stakeholders to determine if there is support to further explore an EIA control option which necessitates continued federal involvement. Comments from the stakeholder consultation will be used to inform a decision on future program redesign efforts.

3.0 Background

3.1 The Disease

The first Canadian case of EIA was recorded in 1881 in Manitoba and was referred to as "Swamp Fever". It is a disease that affects the immune system of members of the Equidae family including horses, donkeys, mules, and zebras and has been found around the world. The disease is caused by the equine infectious anemia virus (EIAV) which is a *Lentivirus* of the family Retroviridae and results in life-long infection for which there is no treatment or available vaccine. It is a relative of the human AIDS virus (human immunodeficiency virus) but poses no threat to people[1]. Under natural conditions, EIA is most frequently transmitted mechanically between equines that are in close proximity by large biting insects such as horseflies and deer flies (tabanids). This occurs when the fly's feeding is interrupted by the host's defensive response to the painful bite and the fly moves to a nearby susceptible host to complete their meal. Based on the behavior of these flies, a separation distance of at least 200 m between equines has been accepted as sufficient to prevent this mode of disease transmission[2]. It should be noted that man has the greatest potential to spread the disease via contaminated needles, transfusions etc. due to the relatively large amount of blood that is able to be transferred.

Clinical signs of EIA are non-specific and may depend on the strain and/or dose of the virus and the individual's immune response to it. Signs can range from being absent to a mild transient fever to sudden death, although most infections result in few clinical signs. There can be three distinct forms of the disease: acute (first episode and potentially the most infectious); chronic (multiple clinical episodes with varying degrees of infectiousness); and inapparent/asymptomatic (least infectious). The virus has

[1] C. Leroux, J.L. Cadore, and R.C. Monelaro, "Equine infectious anemia virus (EIAV): what has HIV's country cousin got to tell us?" *Vet Res* 35,4 (2004): 485-512.
[2] Foil, L., "A mark-recapture method for measuring effects of spatial separation of horses on Tabanid (Diptera) movement between hosts." *J Med Entomol* 20 (1983): 301-305.

the ability to mutate and evade host immune responses throughout the course of the infection which can result in clinical relapses and accompanying varying levels of infectiousness. This can be common throughout the first 6-12 months of infection and may also occur during times of stress (e.g. pregnancy, increased activity, steroid use). The unpredictable nature of EIA and the fact that all infected equines pose a risk to those who are susceptible has resulted in authorities wishing to control the disease to take the approach of identifying and removing positive equines from the population to break the transmission cycle.

3.2 The Program

EIA became a reportable disease in Canada under the *Health of Animals Act* in 1971 after a reliable serological test was developed by Dr. Leroy Coggins that could identify carriers[3]. As a result, any person who suspected or knew an animal to be infected with the disease was required to report it. The first EIA control program was introduced in Canada in 1972 and since that time the level of federal government involvement in EIA control has varied. Of particular note, in 1994 the federal government significantly reduced its role so that Agriculture Canada was only required to notify owners if their equine had tested positive; management of the infected animal was the responsibility of the owner in consultation with their veterinarian. The government was no longer involved in the identification and testing of contacts, ordering the destruction of infected animals and paying compensation for losses. In 1998 the newly formed CFIA responded to a request from the equine industry to reinstate previous disease response activities and provide more assistance in the control of EIA in the country. The CFIA agreed on the basis that by not doing so there could be negative impacts on the health and welfare of the national herd and international trade. A condition of the agreement was that the program was industry-driven and funded by way of a partial cost-recovery mechanism to help cover CFIA program delivery expenses. A system was put in place whereby private labs approved by CFIA collected $2 for each sample that was submitted for EIA testing by a CFIA accredited veterinarian; this amount was to offset the cost of compensation paid and has not changed since 1998.

Canada's current EIA control program has two main components. The first involves horse owners voluntarily paying to have their animal tested to comply with industry-identified requirements (e.g. to attend comingling events such as shows, races or facilities), to comply with export requirements, and perhaps to practice on-farm biosecurity. Sampling is conducted by private veterinary practitioners accredited by the CFIA to do so and testing is performed at private laboratories approved by the CFIA. The exception to this is when export requirements necessitate that sampling and testing be performed by CFIA veterinarians and laboratories (i.e. for export to countries other than the U.S. or Mexico).

The second component of the program is CFIA's mandatory response and this occurs when a positive equine is identified. Depending on the specifics of a case the response may include any of the following: ordering and enforcing movement restrictions (i.e. quarantines); performing epidemiological investigations to identify exposed equines (e.g. on-premises contacts, fence-line contacts, those in

[3] L. Coggins, N.L. Norcross, and S.R. Nusbaum, "Diagnosis of equine infectious anemia by immunodiffusion test." *Am J Vet Res* 33 (1972): 11-18.

contact within 30 days of the sampling date); performing sampling and testing of identified suspects; and, issuing orders, and having oversight of, the removal of infected animals (i.e. permanent quarantine or destruction with compensation). Positive equines exhibiting clinical signs are ordered destroyed although the owner of a positive equine that is asymptomatic for the disease is given the choice of maintaining it under permanent quarantine conditions or having it humanely destroyed. Owners of equines ordered destroyed due to EIA infection are eligible to receive compensation up to a maximum of $2000 per animal as per the *Compensation for Destroyed Animals Regulations*. This maximum compensation amount was specifically negotiated between the CFIA and industry for use only in the EIA program.

Depending on the specifics of a case, CFIA response activities can be extensive and result in the expenditure of significant resources. This is especially the case when investigations occur in remote areas, on premises with large herds, and on premises where owned and semi-feral populations are able to comingle. These expenses are not cost-recovered and in most years industry contributions to the program fall short of fully covering compensation payments.

Canada's established import requirements are another important aspect of EIA control in Canada. When importation from a given country is permitted, anyone bringing an equine into the country must prove that the animal has been appropriately tested for EIA, has had no known exposure to the disease within a designated period of time, and is not exhibiting any clinical signs compatible with infection. Depending on the country of origin, post-import testing requirements may also exist. In general, Canada's ability to impose such restrictions on our international trading partners is based on the fact that we have a domestic disease control program in place.

4.0 Key Challenges to Current Approach to EIA Control in Canada

The CFIA is reviewing the EIA disease control program to identify the main challenges and opportunities for improvement. The goal is to work with stakeholders to develop a disease control option that is effective and both fiscally and operationally feasible. It is important for CFIA's disease control programs to continue to evolve and keep pace with changes that are occurring within the operating environment.

4.1 The program goal is not clear

Historically it has been stated that the program aims to control EIA in Canada. Considering disease characteristics and the range of geographic and industry factors that have the potential to affect the occurrence and spread of EIA, this statement is very broad. A clear and measureable goal is a key component for effective program development and on-going evaluation. It also allows a program to be more responsive when accomplishments and challenges are identified.

4.2 Reservoirs of infection exist in the untested population

Since the inception of Canada's EIA program, testing has mainly focused on those equines involved in certain industry-identified events and/or those who cross international borders. This has resulted in the establishment of a low-risk group of animals, many of whom are tested multiple times throughout their life. In contrast there are a large number of untested equines who do not participate in activities for which testing requirements exist and these animals serve as potential disease reservoirs. The untested horses may be owned, semi-feral or feral and the degree of transmission risk they pose depends on factors such as their geographical location, proximity to susceptible animals, and the presence of a capable vector (e.g. tabanids).

It should be noted that it is the CFIA's mandate to control specific diseases in owned animal populations; the provinces are responsible for the management of their respective wild populations, other than those in national parks. It is generally accepted that EIA is present in some wild and semi-feral equine populations and therefore owned horses that come within close proximity to these groups are considered to be at risk for contracting the disease.

The failure of some owners and managers to test and/or segregate equines prior to their introduction onto a premises has likely contributed to the spread of EIA and its persistence in certain areas. Another factor that contributes to the persistence of EIA in a population is the failure to diagnose the disease in those equines who present with clinical signs compatible with infection. These issues speak to the need to increase education efforts for those involved in the management and caretaking of equines including owners, veterinarians, facility owners/managers, event organizers etc. It is hoped that the adoption and implementation of industry developed biosecurity standards along with targeted, local-level education strategies will help to address these areas of concern.

Finally, when the current EIA program was developed in 1998, an agreement was reached to limit CFIA's trace-out activities to the 30 days prior to the date an infected equine was discovered, regardless of the time of year. This was done in an attempt to control CFIA's program costs. Based on the science of natural EIA transmission (i.e. that it is most likely to occur during a preceding vector season), this "modified stamping out" approach has the potential to leave unidentified positives (reservoirs) in the population. This response limitation puts the onus on industry to ensure appropriate testing check-points continue to be in place to identify additional positive cases.

4.3 The majority of EIA surveillance occurs in eastern Canada where risk is low

The amount of EIA testing that occurs in Canada is seen to vary not only by discipline but also by region. Approximately seventy percent of accredited vet testing for EIA occurs in the provinces east of the Manitoba-Ontario border even though less than 40% of the national herd lives there. Despite the higher proportion of surveillance testing performed in the east, only ~ 1.5% of the total number of positive cases between 2001-2013 were identified in the area; the remaining ~ 98.5% were found in the west. The difference in surveillance testing is likely in part due to the implementation of more widespread and consistent testing requirements by the equine industry in eastern Canada.

Another factor that has been suggested as contributing to the lower-risk situation in the east is the relatively low number of wild and semi-feral horse populations in the area. Specifically, only one of Canada's 5 main wild horse herds exists there; the Sable Island herd off the coast of Nova Scotia. For obvious reasons it can be concluded that if the disease were present among the Sable island herd, the risk of transmission to mainland animals would be negligible. The other four wild herds are found in the west and include 2 herds in BC's Brittany Triangle (Chilcotin), one on the eastern slopes of Alberta's Rocky Mountains, and one in Saskatchewan's Bronson Forest. Reports of owned equines being in close proximity to and/or comingling with some of these groups exist.

Finally, the relative lack of community pastures in the east is also thought to contribute to the lower occurrence of EIA in the area. Community pasturing is seen most frequently among certain groups in the west and due to the inherent comingling of equines of unknown disease status during vector season, the potential for EIA transmission exists.

4.4 CFIA's current mandatory response can have limited impact in areas where the disease is considered enzootic

For a disease control program to have its intended impact, it needs to be structured to reflect what is known about the environment in which it is operating. The CFIA's current mandatory response results in the CFIA identifying a particular subset of EIA suspects for testing and ordering the removal of identified positive cases from the population.

The effect this approach is having on limiting the occurrence and/or spread of EIA in areas where the disease is considered to be enzootic is questionable. This is highlighted on premises for which extensive and costly investigation efforts have taken place to eliminate the disease, only to have it reoccur within a year or two. The reasons for the reintroduction can be multifactorial and may include any of the following: close proximity of a premises to untested populations; lack of recommended on-farm biosecurity practices (e.g. not testing new introductions, poor vector control, reuse of blood contaminated needles and/or equipment on susceptible animals), permitting the comingling of equines with those of unknown disease status (e.g. at events, community pastures, facilities); and lack of testing of clinical suspects. Another contributing factor may also be the limited 30-day trace-back period in current policy which potentially leaves unidentified infected horses in proximity.

4.5 The cost of delivering the program

The resources required to deliver the national disease control program are significant and include those associated with the EIA laboratories (e.g. CFIA oversight of approved labs and CFIA lab testing), CFIA oversight of EIA accredited veterinarians, CFIA disease investigation activities (e.g. sampling, performing epidemiological investigations, imposing movement restrictions, monitoring, ordering destruction), compensation payments, and industry expenses for testing and enforcing requirements.

Although industry contributes some funds to toward the program, a growing imbalance exists with the CFIA bearing the majority of costs which continue to mount due to ongoing disease detection in western

Canada. As the administrator of the program the onus is on the CFIA to work with partners to ensure that both private and public funds are being used as responsibly and effectively as possible to attain a realistic goal.

4.6 Varying levels of support for the program

One of the main benefits of a national program can be its coordinated and uniform approach to control. Conversely a program's impact may be limited if it is not structured to reflect the different disease characteristics in the regions and the unique challenges faced. As previously stated, the current national program is the result of negotiations that took place between industry and the federal government in 1998. Although the majority of stakeholders agreed on the program, there are a variety of opinions about it and levels of support for it. These differences appear to be most evident among groups in western Canada.

4.7 Lack of unique individual animal ID and equine traceability

The CFIA has some significant difficulties performing disease control activities associated with EIA due to the lack of a unique individual animal identification system for equines in Canada. For example, the current written and pictorial descriptions of an equine and its markings have been insufficiently accurate to conduct EIA measures in certain circumstances. This has resulted in the CFIA having to expend extra resources to properly conduct investigations. Also, the lack of a national standardized ID system to identify individual equines has impacted the CFIA's ability to effectively and efficiently track relevant health and movement information. The absence of a searchable database containing testing information also contributes to the difficulties faced. These gaps in information as well as technology make it challenging for the program to be as responsive and effective as possible.

5.0 Equine Biosecurity Advisory Committee – Initial Consultation

In the fall of 2014, the EBAC was approached by the CFIA to enter into preliminary EIA program redesign discussions. The EBAC is composed of approximately 20 individuals representing different regions of the country and a variety of equine industry stakeholder groups including academia, provincial governments, owners, national organizations, veterinarians etc. The primary function of the EBAC is to work with the CFIA biosecurity team to develop voluntary biosecurity standards for the industry; this project is on-going. As EIA was part of the biosecurity discussions, this group was identified as being a useful resource with whom to begin the program redesign consultation process. Presentations were given by the national EIA program specialist to provide a historical and current perspective on the EIA program and key challenges were highlighted. Some high-level disease control options were included in the information to create a starting point for discussion and generate thinking.

The options presented had varying degrees of disease control activity and federal government involvement. The most aggressive approach along the continuum was eradication which would involve

"stamping-out" the disease in Canada. In the middle was an option in which the CFIA would divide Canada into two zones at the Manitoba-Ontario border, implement requirements for testing of horses moving from the west to protect the east, and have no federal response to EIA in the west. Another option was to maintain the current program structure with changes made to industry's role in disease response activities and/or make modifications to other program elements that would help to offset CFIA expenses. The final options presented (at the other extreme) were to maintain EIA as a reportable disease but have limited federal government involvement (i.e. it would be industry's responsibility to respond to all identified positives as they saw fit), or to no longer have an EIA disease control program in Canada.

A discussion guide was used to obtain group feedback which was supplemented by individual communications when clarification was required. All responses were reviewed and the major points heard by the CFIA were:

- **Program goal – protect the owned, tested population**
- **CFIA oversight and involvement in an EIA program is desirable** to allow for a coordinated and effective effort
- **Protect the gains that have been made in eastern Canada**
- Several groups want a program that allows for **some level of EIA control in western Canada** while at the same time minimizes the impact on the individual owner whose actions pose little to no risk to the tested population
- **International perception and minimizing impacts on related trade and commerce** are important
- **Improved equine ID and traceability** is needed
- **Improved data collection and analysis** is needed

6.0 Proposed National EIA Risk Management Strategy

Faced with a broad mandate – food safety, plant and animal health, the CFIA must consider how it can improve the efficiency and effectiveness of all of its operations. In an effort to modernize its programs and keep pace with changes occurring both domestically and world-wide, the CFIA is adopting a more risk-based approach and focusing on areas where impacts can be made. This modern view places an emphasis on systems-based approaches with the regulator's primary role being that of verifying industry's implementation of programs to control the risk of disease and preventing problems before they occur[4]. As such, the CFIA is limiting its role in the containment of established diseases, and focusing on preventing spread to areas where occurrence is low. In addition, the CFIA would like to focus their involvement in control programs on roles and responsibilities for which the federal government is uniquely positioned to perform. Going forward, it is important for stakeholders to use

[4] *Integrated Agency Inspection Model (iAIM)*, Canadian Food Inspection Agency (2015). Website posting pending.

this modern lens when evaluating national disease control program options and the part that the CFIA plays in them.

Taking into account the overall direction in which the CFIA is going in to protect human, animal, and plant health in Canada, the current challenges of controlling EIA in Canada and input received from EBAC the following strategy for a redesigned EIA program is being put forward for discussion. At the early stages of any new process it is expected that some areas will require further development and refinement. There will also be unanswered questions regarding potential impacts on stakeholders and it will be important identify and evaluate these as best possible when they arise.

6.1 Goal of the program

As the general consensus among industry and government is that it is unrealistic to eradicate EIA in Canada at this time, a new program needs to clearly identify a target population and objective goals. Based on available data and input to date, the CFIA is proposing that the goal of a redesigned EIA program would be to suppress EIA (decrease occurrence) in the owned, tested population of horses in Canada and minimize the risk of EIA transmission to them.

6.2 Protect the progress made in eastern Canada

The experience of the CFIA, supported by available data, indicates that the risk of being infected with EIA is higher in horses in western Canada than in eastern Canada. Considerable gains have been made in decreasing the occurrence of EIA in tested horses in eastern Canada. In order to protect this group, the CFIA is proposing to make Canada west of the Manitoba-Ontario border a primary zone for EIA and implement an EIA testing requirement for those equines moving east across this interprovincial border. The reason for selecting this point in Canada is based on the relatively high number of EIA cases that have been identified in BC, YT, AB and SK as well as the logistics of travelling from western to eastern Canada. There is only one principle road which crosses the MB-ON boarder and this site has been used as a data collection point for livestock shipments in the past. All other land routes from western to eastern Canada would involve crossing into the U.S. which would necessitate an EIA test to be performed (*United States Department of Agriculture* requirements). The logistics of putting a primary zone and movement controls in place will require significant development and assistance from stakeholders.

6.3 EIA control measures in western Canada

With the declaration of a primary zone, the CFIA has the authority to impose movement requirements within the zone. The goal of the proposed program redesign is to suppress the disease in the tested horse population and the most effective way to accomplish this is to prevent the exposure of negative equines to those of unknown disease status. Therefore it would be appropriate to target equines attending sites or events where comingling can occur. Mixing of animals at terminal locations such as abattoirs and associated feedlots would not present the same disease transmission risk to the tested population and therefore testing this population would not be considered useful. In contrast, shows,

exhibitions, auction marts and other gathering venues are potential transmission risk points and therefore appropriate targets for movement controls. Increasing disease control efforts at points of sale (e.g. auction marts), has been used effectively by some authorities in the U.S. as a means of identifying new positives (reservoirs) and significantly reducing the occurrence of disease[5] .

As there is a diversity of industry opinion on how aggressive EIA control should be in western Canada, thoughtful discussion and input will be required. It will be important to consider how best to protect the target group while at the same time minimize the onus placed on owners of those equines who pose little to no threat to the tested population. Requirements for the new program can be phased in and/or designed in a manner so that they may be ramped up or modified if goals or circumstances change.

What is being proposed by the CFIA as a possible starting point, is for controls (EIA testing requirements) to be imposed for the movement of equines, within the primary zone, associated with the payment directly by or to the owner (e.g. for shows, exhibitions, sales). As stated, this area of the program will require considerably more discussion and development.

6.4 Measures associated with an EIA positive horse

As described in section 3.2 of this paper, the CFIA carries out activities at two different levels in association with an EIA positive horse, both of which require resources. The measures are associated with: 1) the identified test positive horse itself; and, 2) the potentially exposed equines identified during the epidemiological investigation (i.e. on-premises contacts, fence-line contacts, 30-day trace-back contacts).

In the suggested national EIA risk management strategy, the CFIA is proposing to continue to: quarantine EIA test positive horses; conduct final diagnostic testing on horses that test positive on EIA screening tests; order destruction of confirmed EIA positive horses; and based on the order to destroy, pay compensation for the positive horse. The rationale for continuing these activities is that CFIA is somewhat uniquely positioned to act as the national reference lab for confirmatory EIA testing; to order destruction of an EIA positive horse anywhere in Canada and pay the associated negotiated compensation for that animal. In order for the CFIA to continue these activities, re-examination of the industry check-off fee put in place in 1998 requires reevaluation.

The CFIA is proposing to discontinue performing activities for those horses exposed to an EIA positive animal and this is for a few reasons. First of which is that the agency is looking to be involved in activities where their actions can have an impact on the disease. The limited 30-day trace-back period in current policy is not based on science but rather CFIA capacity limitations. This approach is thought to have minimal impact on the disease, especially in areas where EIA is considered enzootic. Also, the ability to identify exposed contacts and perform sampling is not a function that is unique to the CFIA and can be carried out by other groups and individuals such as horse owners, property owners and private veterinarians. A more collaborative approach to disease response among stakeholders has the potential

[5] R. Ford, "Kentucky's 2010 EIA Surveillance and Testing: A Successful Model of Disease Surveillance." (April 11, 2011). Retrieved from http://www2.ca.uky.edu/gluck/q_apr11.asp#EIA

to address this gap. In general, stakeholder collaboration is being encouraged by the federal government to improve the effectiveness of disease control efforts as is seen in several existing animal, plant and human disease control programs.

As previously described, the EIA situation in eastern Canada differs from that in the west. Therefore, consideration could be given as to whether the CFIA should have a similar response to the identification of positive cases across the country vs. being more aggressive if it were found in the east. An argument could be made for a two-tiered CFIA response that would target resources when an impact could be realized (i.e. in the east). This would fall in line with broader agency objectives and be a way of recognizing the accomplishments and contributions made to date by eastern Canada's equine industry.

6.5 International perception and trade

The general approach being proposed is recognized internationally as a successful means of preventing the spread of animal disease and facilitating ongoing trade. By identifying a region of higher health status while at the same time maintaining some level of control within the primary zone, potential impacts on international perception and trade would be considered negligible.

Also, the adoption of this strategy would allow those individuals and organizers in either zone to make risk-based decisions and impose appropriate biosecurity measures to protect their equines. For example, event organizers within the primary zone could create a low-risk environment by implementing: pre-attendance testing requirements; a vector control strategy; and, effective isolation strategies for clinically ill animals. This is an area where education efforts at the local level regarding appropriate biosecurity will need to be made.

6.6 Linking EIA control with improved ID and traceability

An effective identification system is a key component to any successful disease control effort and a national standardized system that would allow for the identification and tracking of an individual equine could have a significant and positive impact on the EIA program. The establishment of such a system would also have benefits for the equine industry beyond the program and because of this it is being proposed that a national standardized equine ID system be developed and implemented in association with EIA testing in the future. Significant stakeholder collaboration will be required in this area.

It should be noted that a commercially available product currently exists on the U.S. market that utilizes modern technology for EIA sample submission, result reporting, and has improved animal ID capabilities (digital photography). It is possible that such a product could be used as an option to help control EIA in Canada and the CFIA has been making efforts to explore this.

6.7 Data collection and analysis

The ability to effectively and efficiently collect relevant data relating to an animal's identity, movement and health status improves the ability to deliver a disease control program and evaluate its performance. Effective data analysis enables program administrators and stakeholders to make

informed decisions and respond to disease changes and challenges as they occur. The identification of potential research and/or stakeholder collaboration opportunities can also occur through this process.

6.8 Summary of Proposed Strategy

- Aims to protect Canada's owned, tested population
- A national approach that is based on movement controls (testing requirements) for those equines moving :
    - from western to eastern Canada
    - to identified comingling sites within western Canada
- CFIA disease response activities would be limited to the positive case and not include exposed equines
- Stakeholder collaboration will be required to improve program effectiveness in areas such as:
    - identification and sampling of exposed contacts
    - identification of effective control points and requirements
    - individual animal ID and traceability
    - data collection and analysis
- Significant and ongoing discussion and collaboration is required to develop and implement a redesigned program

7.0 Next Steps

The CFIA looks forward to receiving feedback from Canada's equine stakeholders on the information provided in this document. The results of this consultation will be used to determine if there is interest among stakeholders for the CFIA to work collaboratively with its partners to further explore the possibility of a national strategy to control EIA in Canada. If support is received, the CFIA would be looking to put together a working group composed of equine stakeholders to move the initiative forward in 2015.

Please submit written comments via email to EIA-AIE@inspection.gc.ca by June 30, 2015.

Written comments may also be sent by facsimile to (613) 773-7573 to the attention of Dr. Carolyn James, Domestic Disease Control Programs.

8.0 Glossary of Terms

Asymptomatic – free of any clinical signs of disease

CFIA – Canadian Food Inspection Agency

EIA – Equine Infectious Anemia

Enzootic – present or usually present in a population or geographical area at all times, in contrast to epizootic.

Epizootic – temporarily prevalent and possibly widespread in an animal population.

Equine – any animal in the family *Equidae*, including horses, donkeys, mules, and zebras.

Exposed – an equine is considered to have been exposed to EIA when there has been the potential for contact between an infected equine and a susceptible equine that could allow for the transfer of EIA-infected blood or bodily fluids.

Primary control zone – a declared geographic area where the Minister of Agriculture and Agri-Food believes that EIA exists.

Secondary control zone – a geographic area declared for the purposes of preventing spread of EIA.

Surveillance – a program to assess the health and disease status of a given population and to promote the early detection of disease to maximize the effectiveness of control measures and minimize the costs and economic losses.

Zone – a clearly defined part of a territory that contains an animal subpopulation with a distinct health status with respect to EIA for which required surveillance, control, and biosecurity measures have been applied for the purpose of disease control and international trade.