Natural Products Marketing (BC) Act Mandatory Notifiable Avian Influenza Insurance Review

Phase 3 Report Do the Conditions of Insurance Exist? November 3, 2017











Natural Products Marketing (BC) Act Mandatory Insurance for Registered Poultry Producers Phase 3 Report – Do the Conditions of Insurance Exist?

Executive Summary

The Mandatory Notifiable Avian Influenza Insurance Review (the "Review") is intended to provide the regulated poultry boards and commission in BC with the research and analysis to determine whether or not to apply the authorities granted under the *Natural Products Marketing (BC) Act* (the "*NPMA Act*") to require producers to maintain insurance against losses resulting from Notifiable Avian Influenza (NAI) discoveries. The regulated poultry boards and commission must ensure that the application of the requirement is in keeping with sound marketing policy. This report is the third phase of a five phase project to conduct the requisite due diligence to support the regulated poultry boards and commission decision making process. This phase establishes that the conditions of insurance exist.

Phase 1 of the Mandatory Insurance Review established that the financial consequences of discovery of a NAI are significant for the poultry industry in BC. The overall economic impact of the 2004 HPAI outbreak was in excess of \$300 million in lost economic activity. It was established that a financial response is required to enable a timely return to a system of orderly marketing, in particular as it relates to covering the extraordinary costs of infected premise cleaning and disinfecting ("C&D").

Under the *Health of Animals Act* (the "HoA Act") producers are not eligible for compensation from the Canadian Food Inspection Agency (the "CFIA") for the cost of infected premises C&D. For the most part, the individual owners of the infected premises have been held harmless from the extraordinary cost of C&D. The financial interventions for 2004 (processors, boards and commission) and 2014 (federal and provincial governments) were equally and if not, more important in the timely initiation and completion of the infected premises C&D and contributed significantly to the timely return to a system of orderly marketing.

With Phase 1 having concluded that a financial response was required to address the extraordinary cost of infected premise C&D, Phase 2 further assessed the existing financial and policy supports available; identifying gaps and recommending options for addressing any gaps identified. The primary gap relates to the federal and provincial government policy position to not support future use of AgriRecovery to address the extraordinary costs of infected premise C&D. The lack of a formalized financial response to cover the extraordinary costs of infected premises C&D limits the boards' and commission's ability to facilitate the recovery of the poultry industry and the timely return to a system of orderly marketing. As such the poultry boards and commission intervention through the commitment of financial support to off-set the extraordinary costs of infected premises C&D accords with sound marketing policy.

The boards and commission have contingencies in place that could provide the financing to cover the extraordinary costs of infected premises C&D in the event of a future NAI discovery. The Phase 2 analysis identified two major policy issues that the poultry boards and commission need to address:

- Whether the chicken and turkey marketing schemes need to secure the express authority for the two boards to use retained levy proceeds "to pay costs and losses incurred in marketing a regulated product" as it pertains to a NAI discovery.
- The need to act collectively or independently in addressing the extraordinary costs of infected premise C&D.

The boards and commission affirmed that it is in the interests of sound marketing policy to intervene and commit financial support to off-set the extraordinary costs of infected premises C&D. As well they affirmed that all licenced producers realize the benefits of this action and agreed in principle to further examine mechanisms for all producers to share in covering the costs through a collective fund, the Infected Premises C&D Cost Recovery Fund (the "Fund"). It was also affirmed that an analysis of the benefits and costs of risk transfer mechanisms be explored.

The Phase 3 analysis affirms that the conditions of insurability exist and that an insurance product can be designed on an actuarially sound basis. Phase 1 and Phase 2 determined the need to cover the costs of infected premises C&D. Options for self-insuring and transferring the financial risk were examined and analyzed. For each approach, costs and benefits were identified and the advantages and disadvantages were weighed.

- 1. The boards and commission establish individual funds to self-insure the costs associated with a NAI discovery, including infected premises C&D administered and governed jointly by the boards and commission.
 - o Least cost approach, but not without potential problems
 - Uncertainty with respect to frequency and amount of contributions to address the need to replenish the fund after each event by an amount unknown
 - Inability to withstand back to back major losses
- 2. A formalized collective fund to self-insure the costs of infected premises C&D.
 - o Initial capital infusion plus annual contributions to grow the fund.
 - May require additional capital infusions and extended annual contributions to realize fund target levels.
- 3. A formal insurance-based approach whereby licenced producers are the insureds; specific insurance policies are defined; annual premiums assessed; and premium proceeds deposited into an insurance fund to pay claims.
 - Licenced producers would be indemnified, either individually or collectively through their associations being the "insureds".
 - Reduces the capital requirements over time.
 - o Enables the fund to build in a systematic manner over time if so desired.
 - o Enables industry to withstand extreme loss situations.
 - Minimizes the time to recover the fund and enables the industry to withstand back to back major losses
- 4. A formal insurance-based approach whereby the boards and commission are the insureds; specific insurance policies are defined; annual premiums assessed; and premium proceeds deposited into an insurance fund to pay claims.
 - o The boards and commission would be indemnified
 - Internalizes the costs thereby eliminating the need to require producers to maintain insurance against disease losses.
 - Reduces the capital requirements over time.
 - o Enables the fund to build in a systematic manner over time if so desired.
 - o Enables industry to withstand extreme loss situations.

 Minimizes the time to recover the fund and enables the industry to withstand back to back major losses

Either of the two formal insurance based approaches could be used to attract federal and provincial seed funding to reduce the initial capital outlay. The insurance fund can be protected through purchase of reinsurance. A licenced insurance company to provide the coverage is required.

It is recommended that the boards and commission take advantage of the ability to transfer the financial risk to ensure that the necessary funds to carry out infected premises C&D are available and do not hamper the timely return to a system of orderly marketing. It is further recommended that the boards and commission further pursue risk transfer options that see them as the "insured party" and negate the need to require producers to maintain disease insurance.

Based on the authorities within the *NPMA* that enable boards and commissions to use levy funds to "pay for costs and losses incurred in marketing a regulated product"¹, the boards and commission would assume the responsibility to cover and internalize the cost of infected premises C&D on behalf of the licenced producers. The boards and commission could opt to purchase insurance to protect the Fund and cover excess costs and eliminate the need for requiring the licenced producer from having to maintain insurance against losses resulting from a notifiable disease. In addition, it is recommended that the BC Chicken Marketing Board and BC Turkey Marketing Board amend their respective schemes to include the *NPMA* enabling authority, as it is currently explicitly excluded to minimize the risk of successful challenge.

The projected costs of an insurance-based risk transfer mechanism can be significantly less than using a self-insurance approach and will not unduly affect or alter the competitiveness of the poultry producers or processors in BC. The use of a formal risk transfer mechanism provides greater discipline and accountability to ensure that the poultry industry as a whole benefits from an Infected Premise C&D Recovery Fund.

BC Poultry Industry Mandatory Insurance Phase 3 Report 2017-11-03

¹ Natural Products Marketing (BC) Act, section Section 11 (1) (o) (iii), Powers of marketing boards and commissions.

Natural Products Marketing (BC) Act Mandatory Insurance for Registered Poultry Producers Phase 3 Report – Do the Conditions of Insurance Exist?

Expected Outcome

The poultry boards' and commission's due consideration of financial risk transfer options to cover the costs of cleaning and disinfecting (C&D) infected premises following a Notifiable Avian Influenza (NAI) discovery as an integral part of maintaining a system of orderly marketing.

Introduction

The passing of the amendments to the *Natural Products Marketing (BC) Act* (the "NPMA") in May 2015 made explicit the authority of boards and commissions to require producers to maintain insurance against losses resulting from the interruption or termination of production for any reason or for a notifiable or reportable disease. The regulated poultry boards and commission have given due consideration to the enabling authority and collectively agreed in January 2016 to initiate the Mandatory Notifiable Avian Influenza Insurance Review (the "Review"). The purpose of the Review is to conduct the requisite due diligence in accordance with the SAFETI² principles for each board and commission to make a decision on whether or not to implement mandatory insurance requirements to address the financial consequences of Notifiable Avian Influenza (NAI) discoveries in British Columbia.

In March and April 2016 based on the Phase 1 and Phase 2 reports, the regulated poultry boards and commission affirmed the following:

- 1. Support the arguments put forth that it is in the interests of sound marketing policy to intervene and commit financial support to off-set the extraordinary costs of infected premises cleaning and disinfecting (C&D).
- Agree that all licenced poultry producers realize the benefits of the boards and commission assuming the extraordinary costs of infected premises C&D and as a result further examine mechanisms to be put in place for all producers to share in covering the costs through seeding and maintaining a collective fund.
- 3. Support the continued exploration and analysis of the benefits and costs of risk transfer mechanisms that may or may not lead to mandatory insurance requirements.
- 4. Agree that the British Columbia Chicken Marketing Board (BCCMB) and the British Columbia Turkey Marketing Board (BCTMB) consider amending their respective schemes to ensure the express authority to use levy proceeds "to pay cost and losses incurred in marketing a regulated product" is included.

In July, the boards and commission posted the draft Decision Note (Attachment 1) to establish a mandatory Infected Premises C&D Cost Recovery Fund (the "Fund") to cover the extraordinary C&D for future NAI discoveries. As well, the boards and commission sent letters to industry associations and key stakeholders advising of the pending decision regarding the Fund and requesting feedback and comment.

BC Poultry Industry Mandatory Insurance Phase 3 Report 2017-11-03

² SAFETI stands for the British Columbia Farm Industry Review Board governance principles; Strategic, Accountable, Fair, Equitable, Transparent and Inclusive.

This Report is the third of a five phase Review and includes the sound marketing policy rationale for mandatory requirements to effectively respond to a NAI discovery, with a particular focus on:

- What are the options for risk transfer?
- Do the conditions of insurability exist?
 - o Are the risks and losses consistent with the principles of insurance?
- What does the insurance product need to look like to be acceptable to the majority of industry?
 - o What must it cover?
 - o Are the costs acceptable?
 - o Is it actuarially sound?
 - o Is it administratively feasible?
 - o Can the excess loss be reinsured?
- How do the specific components of an insurance product fit within the requirements of sound marketing policy (legislative and regulatory authorities)?
- How would mandatory insurance affect the competitiveness of the BC poultry industries?

Subsequent reports will be prepared on the remaining two phases:

- Do viable insurance delivery mechanisms exist
- What mandatory insurance delivery mechanism is appropriate

Background

The Phase 1 report – Why is a financial response needed, addressed the following questions:

- How to effectively and efficiently return the poultry industry to a system of orderly marketing?
 - Is a financial response necessary?
 - o What other options/tools are available to the boards and commission?

Phase 1 concluded that a financial response was necessary to address the extraordinary costs of infected premises C&D. Irrespective of the type of operation that has contracted NAI the entire poultry industry in BC can be held in abeyance from returning to a system of orderly marketing if the financial burden of the infected premises C&D costs are not addressed in a proactive manner. An industry-wide financial response to cover or defray the extraordinary costs of infected premise C&D is required and is consistent with sound marketing policy. It supports the boards' and commission's ability to return the poultry industry in BC to a system of orderly marketing in a timely manner.

The Phase 2 report – Scope of a financial response provided the sound marketing policy rationale for mandatory requirements to effectively respond to a NAI discovery, with a particular focus on:

- Identifying gaps in maintaining a system of orderly marketing in the event of a major disease outbreak.
- Analysis of options for satisfying a system of orderly marketing.

The federal and provincial governments stated following the 2014 Highly Pathogenic Notifiable Avian Influenza outbreak that they would not consider future industry requests for financial assistance under the AgriRecovery Program given the recurring nature of NAI in BC. The stated government position and the absence of a coordinated industry-wide financial response

leave the infected premise owner with the responsibility and financial burden for the extraordinary costs of C&D. To enable the timely return to a system of orderly marketing, the poultry boards and commission need to address the gap created by the federal and provincial government policy position to not support future use of AgriRecovery to cover the extraordinary costs of infected premise C&D.

While each board and commission has contingency funds, only the BCTMB has specified a commitment to the use of contingencies to self-insure to provide a contingency in the event of future turkey disease outbreaks. Further, the BCCMB and BCTMB regulatory authority is not explicit to the extent of those for the British Columbia Broiler Hatching Egg Commission (BCBHEC) and British Columbia Egg Marketing Board (BCEMB) in the ability to use levy funds to "pay for costs and losses incurred in marketing a regulated product"³. While the risk of challenge of the lack of express authority has been assessed to be low, the potential for a successful challenge is high, particularly for the broiler and turkey industries.

The ability of contingency funds to address the gap and provide the necessary protection is currently limited due to the highly unpredictable nature of NAI and variability of actual funds in place by sector. NAI needs to be recognized and accepted as an on-going risk to be actively monitored and managed. In the event of back to back NAI discoveries and depending on the severity of the outbreak, current contingencies could easily be depleted, requiring them to be replenished during a time of recovery and limited returns. Mechanisms to manage the risk need to be explored.

Risk Management

BC Poultry Risk Mitigation Strategy

The BC poultry industry has adopted a continuous improvement process in addressing NAI discoveries. As a result of the 2004 HPAI outbreak, the BC industry worked with both federal and provincial governments to develop a four part risk mitigation strategy. Since the adoption of the strategy in 2009, the industry has reviewed and revised the strategy based on experience gained with subsequent NAI discoveries. The four part strategy includes:

- Emergency Response
- Mandatory Biosecurity
- Enhanced Surveillance
- Disease Insurance

The industry associations working in conjunction with the boards and commission continue to modify the approaches to emergency response, revise biosecurity protocols, and develop an enhanced surveillance system. This Phase of the Review is consistent with and linked to the fourth element of the Strategy, however the four strategies are inextricably linked. Changes to the other three strategies may and can have a significant impact on disease insurance. For example, if the industry adopts an enhanced surveillance system, the frequency of NAI detections are expected to increase, thereby increasing the demand and need for infected premises C&D.

³ Natural Products Marketing (BC) Act, section Section 11 (1) (o), Powers of marketing boards and commissions.

The industry associations are prepared to accept the scaling back of disease insurance to only cover infected premise C&D costs on the basis that the poultry boards and commission keep an open mind to the evolution of and enhancement to the risk mitigation strategy. For example, the development and testing of an Early Response Plan to enhance the current CFIA policies and approaches to containment and eradication of a NAI discovery. The plan may create uncertainties with respect to responsibility for the costs of birds ordered destroyed (shift from government to industry for the index premise) in addition to the cost of infected premises C&D.

With the poultry boards and commission taking on responsibility for covering the cost of infected premises C&D they assume the financial risk. Advancing the initiatives related to the broader risk mitigation strategy can further add to the financial risk of the Infected Premises C&D Cost Recovery Fund. In managing that risk, there are four typical approaches, acceptance, avoidance, reduction or transfer.

Risk Acceptance

Risk acceptance is the assumption of a risk, typically because the risk-reward profile is attractive and within established tolerance limits. The BC poultry industry has gained experience over the years with NAI and infected premises C&D costs to enable a broad understanding of the possible range in costs resulting from NAI. Given the uncertain nature and timing of NAI, the question to be addressed in Phase 3 is whether or not the poultry boards and commission should simply accept the full risk of infected premise C&D or to consider mechanisms to transfer all or a portion of that risk. An actuarial assessment was initiated to ensure a more fulsome understanding of the expected losses to be covered.

Risk Avoidance

Risk avoidance involves techniques to manage risk through taking steps to remove the hazard, engaging in alternate activities or ending specific exposures. Given the nature of NAI, it is not possible to remove the risk of incursion completely and remain in production. In other words, the only means to avoid the hazard is to simply not engage in poultry production in British Columbia which is not realistic. Thus the boards and commission must accept responsibility for managing the risk to serve the interest of sound marketing policy. Leaving the financial responsibility with the infected premise owner will not likely yield timely decisions and actions to enable the return to a system of orderly marketing.

Risk Reduction

Risk reduction is a collection of techniques for addressing risk exposures, typically applied to lower risk probabilities and impacts to suit the risk tolerance of an individual or organization. The boards and commission have in place mandatory biosecurity measures to reduce the risk of NAI incursion and transfer. While the measures serve as a means to reduce risk, as stated at the October 2016 Poultry Avian Influenza Poultry Industry Workshop, biosecurity can only prevent disease incursion to a certain level, it cannot and will not prevent incursion from happening. The poultry industry maintains a continuous improvement program to review and revise biosecurity, with a full review after a NAI discovery.

Risk Transfer

Risk transfer is the assignment of a risk to a third party using a legal agreement, typically for a fee. The underlying question for the boards and commission to address is whether or not to adopt some form of risk transfer arrangement to manage the financial risk of infected premises C&D. This Phase will examine in more detail the benefits, costs, opportunities and challenges for the boards and commission to transfer the risk.

Options

The boards and commission have affirmed that it is in the interests of sound marketing policy to intervene and commit financial support to off-set the extraordinary costs of infected premises C&D. Given that all licenced producers realize the benefits of this action there is a need to examine mechanisms for all producers to share in covering the costs through a collective fund as well as to analyze the benefits and costs of risk transfer mechanisms.

The costs to C&D infected premises based on past experiences, range from \$100,000 to \$3 million. A recently completed actuarial analysis by J.S. Cheng and Partners Inc. established the expected losses for various scenarios, LPAI, HPAI and catastrophic events. The results of the analysis ranged from \$16,580 to \$4.4 million, with a mean value of \$62,411.

To manage the financial risk of infected premises C&D, the boards and commission have contingencies in place that could address the costs of infected premises C&D. To have an effective response system for covering the cost of infected premises C&D, the boards and commission will need to dedicate a portion of levies on an annual basis to the Infected Premises C&D Cost Recovery Fund. The Fund will require specific criteria and parameters such as the following which will be described in more detail later in the report:

- Eligible costs to be covered
- Limitations, if any, on coverage, i.e. per bird maximum, per farm maximum
- Initial fund capital
- Annual or periodic additions to the fund
- Proportionate share of costs
- Management of the fund, i.e. who and how
- Claim procedures
- Administrative requirements
- Other NAI related costs to be considered

The boards and commission are faced with choices as to managing the risk as discussed above. In determining that managing the risk is keeping with sound marketing policy, the boards and commission must next determine if it is in their best interests to assume and retain the financial risk or to transfer the financial risk to a third party as well as examine their legislative authorities to charge and collect premiums. Two basic options will be discussed, the boards and commission retaining the full risk and the boards and commission transferring the risk to a third party. Alternative approaches within each of the two options will also be considered. For each approach, costs, benefits, advantages and disadvantages are weighed.

Option 1 - Boards and Commission Retain Full Risk

Within this option there are two fundamental approaches to be considered:

- a) The boards and commission would commit to maintaining a specified amount within their contingency reserves for infected premises C&D to be drawn upon based on an agreed to formula as a result of a NAI discovery.
- b) The boards and commission would commit to establish a collective fund, administered separate and distinct from individual contingencies. The fund would be used in the event of a NAI discovery to cover the costs associated with infected premises C&D. The fund would be administered and governed jointly by the boards and commission.

Benefits

The boards and commission would retain full control over the management and administration of the Fund(s).

Costs

Either approach requires the boards and commission to commit a specified amount of funding for the purposes of infected premises C&D. The committed level of funding may or may not be sufficient to cover all costs, depending on the frequency and severity of the NAI discoveries. Should there be insufficient funds to cover the costs of a NAI event, additional funds from contingency reserves or through supplemental levies will be required to ensure adequate funding for covering the cost of infected premises C&D and the resulting timely return to a system of orderly marketing.

Based on the actuarial analysis the costs for infected premises C&D have been estimated on an annualized basis as well as for a LPAI occurrence (once every 3 years), a HPAI occurrence (once every 10 years) and a catastrophic level HPAI occurrence (once every 50 years). The coverage assumed in the actuarial assessment was as follows:

Breeders \$2.00 per quota bird
Broilers \$1.00 per quota bird
Layers \$2.50 per quota bird

• Turkeys \$2.65 per quota bird (average for broiler, hen and tom rates)

The estimated cost per occurrence for the BC poultry industry:

Annualized loss \$62,411
LPAI single occurrence \$45,062
HPAI single occurrence \$165,122
Catastrophic HPAI occurrence \$1,557,402
Extreme occurrence \$4,418,059

The actuarial results provide guidance or benchmarks for the boards and commission to consider in reserving levies for the Fund. While losses are not expected to occur each year, the annualized loss provides the mean amount which over a long time series (100,000 simulated years) the cost of the various NAI discoveries would be on an annual basis. As well it provides the level for establishing base premiums if the risk were to be transferred through insurance.

The boards and commission can use the other estimates for the various occurrence scenarios to best determine the total amount of funds to be held in reserve for a future NAI discovery.

The actuarial analysis broke down the estimated share of risk by sector:

•	Breeders	10.8%
•	Broilers	19.0%
•	Layers	57.5%
•	Turkeys	12.7%

The costs are based on a broad range of assumptions that are listed in the actuarial assessment report. The key assumptions of note are that compensation for the cost of infected premise C&D is based on the number of quota birds placed on the infected premise not on the number of birds present at the time of infection (number destroyed and paid by CFIA) and the probabilities of infection for each sector; and the spread risk factors. Quota placement was used as the compensation point as opposed to CFIA destroyed birds is owing to the size of the barn(s) to be cleaned which is typically designed for the full quota placement. Cost per bird as opposed to barn area was used given the variability in barn design between and within poultry sectors. Using per bird cost would provide a simple and easy basis for establishing compensation and adjusting claims.

The boards and commission would be required to determine amount to be seeded into the Fund immediately as well as the upper level limit for the Fund. The actuarial analysis assumes an initial fund balance of \$1 million (allocation by sector based on share of risk is illustrated below). The actuarial analysis recommends stop-loss coverage of \$5 million which means that in the event of a catastrophic NAI event, there would be \$5 million available over and above what the boards and commission have placed in the Fund to cover an extreme HPNAI event. The boards and commission would need to agree if this should be the upper limit of the Fund or if a lower limit, such as \$3 million, based on the 2004 experience be set. As well, the boards and commission would have to determine the time frame over which the upper limit of the Fund would be realized, i.e. 3, 5 or 10 years. Allowances for claims during the period of building the Fund would need to be built in to the annual contributions. To illustrate the minimum cost implications:

\$1 million initial funding, building to \$3 million over 5 years

	Initial Capital	Year 1	Year 2	Year 3	Year 4	Year 5	Total After 5 yrs
Breeders (10.8%)	\$108,000	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$324,000
Broilers (19.0%)	\$190,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$570,000
Layers (57.5%)	\$575,000	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$1,725,000
Turkeys (12.7%)	\$127,000	\$50,800	\$50,800	\$50,800	\$50,800	\$50,800	\$381,000
Total	\$1,000,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$3,000,000

As the total of \$3 million over 5 years is based on no NAI discoveries during the period of Fund building, there remains a fundamental level of uncertainty with respect to this option regarding the availability of the funds necessary to fully cover the risk. If for example a NAI discovery in year 2 resulted in multiple infected premises with \$3 million in claims, the amount of funds accumulated by year 2 would only be \$1.8 million, leaving a \$1.2 million unfunded liability. In addition, the initial capital would have to be replenished within the year to be able to provide coverage for subsequent NAI discoveries.

Existing dedicated (BCTMB) and non-dedicated (BCBHEC and BCCMB) contingency reserves could accommodate the initial and total Fund requirements without adjustment to their current levy. The BCEMB has just set up a formal contingency fund to be funded over the course of the next few years. Given that the layer industry bears the majority of the risk, a significant financial contribution will be required resulting in a possible increase in levy.

The boards and commission would also be responsible for funding the management and administration of the Fund, which may include external costs for managing claims adjusting policies and procedures.

Option 1A – Boards and commission maintain separate self-insured Funds

Each board and commission would follow a model similar to the BCTMB's approach and dedicate a specified amount of their contingency reserves to "self-insure to respond to future turkey disease outbreaks and their impact on the industry". Each board and commission would establish a policy and dedicate a specified amount of their contingency reserves for self-insurance to provide coverage for their share of the extraordinary costs of infected premises C&D. The boards and commission would establish a policy for use of levies to establish the Funds.

Advantages

- Simple to manage, following existing protocols for sharing costs per past joint industry initiatives; no external fund management required.
- Simple to administer; use of existing internal resources for the most part.
- No annual premiums required.

Disadvantages

- Uncertainty with respect to the amount of "reserve" available to cover the full share and cost of infected premises C&D as each sector may choose an amount that is insufficient to cover their share of costs.
- May result in increased levy at a time of industry recovery from a NAI event in order to replenish the Fund where claims exceed the amount available in the Fund.
- Taxing existing internal resources; requires dedicated leadership and coordination of the response which must be determined in advance of the event.
- Potential for inconsistencies in treatment of producers between sectors; boards and commission independently addressing "extraordinary" circumstances and costs.
- Retention of funds within each board for use for the industry as a whole may lead to challenge of authority.

Option 1B – Boards and commission establish a formalized collective Fund

The boards and commission would commit to establishing a jointly administered collective fund and establish levy policies to enable contributions to the Fund. A formal agreement would be established setting out the parameters of the Fund, along with the respective roles and responsibilities of the boards and commission.

Advantages

- Initial, one time capital infusion and a predetermined level of annual contribution to grow the Fund to the target level.
- Improved ability to respond in a predictable manner.
- The application of discipline and rigour to the Fund maintains the option to apply risk transfer mechanisms in the future to protect the capital against extreme loss events. Involvement of a licenced insurance company may be required for fronting purposes.
- May provide the opportunity for sectors to access federal-provincial funding to provide "seed capital" if required.
- Provide the capacity to utilize external resources to manage and administer claims policies and procedures.

Disadvantages

- Requires additional management and administration; annual accounting and reporting.
- Uncertainty with respect to the availability of funds to cover the full cost of an NAI discovery.
- Need to establish requirements for Fund recovery to enable the industry to address back to back major losses.
- May result in increased levy at a time of industry recovery from the NAI event to replenish the fund.
- If losses exceed the amount available in the Fund, boards and commission would need to provide additional funds to
 - o Settle claims; and
 - Replenish the Fund for future losses.

Option 2 – Boards and Commission Transfer the Risk

A formal insurance-based approach whereby, specific insurance policies are defined; annual premiums assessed; and premium proceeds deposited into an insurance fund to pay claims. The application of discipline and rigour to the fund enables the opportunity to apply risk transfer mechanisms to cover and protect the capital against extreme loss events. The formal insurance based approach could be used to attract federal and provincial seed funding to reduce the initial capital outlay. Excess loss and protection of the Fund can be realized through purchase of reinsurance.

Benefits

The boards and commission would be able to transfer a significant portion of the risk in exchange for an annual premium, especially for extreme NAI discovery events. The ability to recover from a catastrophic loss is significantly improved with a lower cost to producers. As well, producers would have the assurance that funds would be available to cover the extraordinary cost of infected premises C&D. Premium revenue in excess of annual costs would result in modest increases in the capital reserves of the Fund.

Costs

The boards and commission would have to incur third party costs for the management and administration of the Fund. The cost of management and administration, depending on the type of insurance arrangement could be a minimum of \$65,000 per year.

Based on the actuarial assessment, the boards and commission would be encouraged to collectively contribute \$1 million in start-up capital to the insurance fund. Total annual premiums could be up to \$200,000 per year depending on the cost of reinsurance. To further illustrate the cost implications:

\$1 million initial funding, with the purchase of \$5 million stop-loss reinsurance coverage

	Initial Capital	Year 1	Year 2	Year 3	Year 4	Year 5	Total After 5 yrs
Breeders (10.8%)	\$108,000	\$21,316	\$21,316	\$21,316	\$21,316	\$21,316	\$214,580
Broilers (19.0%)	\$190,000	\$37,661	\$37,661	\$37,661	\$37,661	\$37,661	\$378,305
Layers (57.5%)	\$575,000	\$113,947	\$113,947	\$113,947	\$113,947	\$113,947	\$1,144,735
Turkeys (12.7%)	\$127,000	\$25,076	\$25,076	\$25,076	\$25,076	\$25,076	\$252,380
Total	\$1,000,000	\$198,000	\$198,000	\$198,000	\$198,000	\$198,000	\$1,990,000

While the start-up cost is the same, the annual cost per sector and the total over 5 years is less than the self-insured example, representing a minimum \$1 million net savings to producers. The boards and commission could choose to reduce the annual contribution to match the insurance premium based option. This however would result in the self-insured example being short of the \$3 million Fund target as per the Option 1 in the event of a 2014 HPNAI event by \$0.75 million. If industry contributions in Option 1 were only \$200,000 per year, the Fund would be \$1.75 million short at the end of year 5. Annual contributions would need to be extended for an additional two to four years in order to reach the \$3 million target, bringing the total industry contribution to \$3.75 million over 7 to 9 years.

In comparison, the use of reinsurance to cover excess loss would result in the boards and commission possibly having to contribute an additional \$100,000 to cover the retained loss amount for the HPNAI event in order to maintain the \$1.0 million Fund balance. The corresponding 7 year total industry cost would be \$2.5 million or \$1.25 million less than under the self-insured option.

Option 2A – Licenced Producers Required to Maintain Disease Insurance

The boards and commission would pursue approval to adopt the enabling authorities under the *NPMA* to require producers to maintain insurance against losses resulting from a notifiable or reportable disease.

Advantages

- Annual premiums enable
 - The same initial capitalization of the Fund.
 - Purchase of reinsurance to cover excess loss situations; minimize the draw on the Fund; and protect the initial capital.
 - A lower annual cost to producers to ensure sufficient funds is available to cover a catastrophic loss situation.
 - A systematic approach to growing the Fund over time.
 - o Inclusion of incremental administrative and management costs.
- Provides a consistent and predictable response. Licenced producers would be indemnified, either individually or collectively through their associations as the "insured party".
- Minimizes the time and amount of money required to recover the Fund and improves the capacity of the industry to withstand back to back major losses without overly taxing producers.
- Provides the opportunity for sectors to access federal-provincial funding to provide "seed capital" if required.

Disadvantages

- A licenced insurance company is required to front the insurance coverage and to act as conduit for the reinsurance.
- Increased cost of incremental management and administration.
- Challenges may arise as a result of the variable level of industry support:
 - The level of acceptance as varies considerably between sectors, from over 90% support in hatching eggs to 54% in broilers.
 - Overall industry support at 66%.
- Depending on the insurance model utilized, industry premiums not retained by the industry for industry benefit over the longer term.

Option 2B – Boards and Commission assume the "insured party" role

The boards and commission would assume the role of the "insured party" and seek insurance to provide the necessary coverage to protect and enhance the Infected Premises C&D Cost Recovery Fund.

Advantages

- Same as Option 2A, plus
 - Would not require the boards and commission to secure the enabling authorities under the NPMA to require producers to maintain insurance against losses resulting from a notifiable or reportable disease.
- The costs of infected premises C&D would be internalized as a activity within the operation of the boards and commission.

Disadvantages

- Same as Option 2A, plus
 - The BCCMB and BCTMB do not have explicit authority under their respective schemes to use levy proceeds to "pay for costs and losses incurred in the marketing a regulated product".

Insurability – Do the Conditions Exist

Prior to completing the assessment of whether or not to transfer the risk to a third party, the boards and commission must be assured that the conditions of insurability exist. The main objective of every insurance contract is to give financial security and protection to the insured from any future uncertainties. Insurance is defined as the equitable transfer of risk of loss from one entity to another, in exchange for a premium. There are seven basic principles of insurance that need to be assessed against to determine whether or not insurance is a viable option to cover the costs of infected premise C&D:

- Utmost good faith is a very basic and primary principle of insurance. According to this
 principle, the insurance contract must be signed by both parties (i.e. insurer and insured)
 in absolute good faith or belief or trust. The person getting insurance must willingly
 disclose and surrender to the insurer their complete true information regarding the
 subject matter of insurance.
 - At this time, there are private insurance companies that offer infected premise C&D coverage as part of a comprehensive poultry disease insurance policy. BC poultry producers can access this coverage through signing an insurance contract with a licenced broker. In the event of a NAI discovery, the producer must report the facts to the insurance company and disclose any and all information relating to the discovery.
- 2. *Insurable interest* states that the insured party must have insurable interest in the property insured and will suffer some financial loss if the property is damaged or lost.
 - Infected premise owners are responsible for the timely C&D following a NAI
 discovery and in the absence of any industry support carry the full financial
 burden for the costs. The cost of infected premise C&D represents the insurable
 interest.
- 3. Indemnity means security, protection and compensation given against damage, loss or injury. According to this principle, an insurance contract is signed only for getting protection against unpredicted financial loss arising due to future uncertainties. An insurance contract is not made for profit. Its sole purpose is to give compensation in case of damage or loss.
 - A NAI discovery is a random chance occurrence and the extraordinary cost of infected premise C&D establishes the extent of an unpredictable financial loss.
- 4. **Subrogation** enables the insured party to claim compensation from a third party who may be responsible for the loss.
 - If insurance is provided for infected premises C&D costs and if it can be
 established by the insurer that another party was responsible for the infection, it
 could seek to recover the claim it has paid to the insured from the party
 responsible for infection.
 - For example, using the 2014 HPNAI event, if private insurance were provided for C&D to the BC poultry industry, the insurance company could have initiated recovery procedures for the cost of IP 3 and IP 4 C&D from IP 1 owing to IP 1 being the source of infection to IP 3 and IP 4.

- 5. **Double insurance or Contribution** is used if the insured took more than one policy to cover the same property and provides that the insured can only be compensated to the extent of the actual loss. The insured cannot recover more than the actual loss and cannot claim the whole amount from both insurers.
 - In the event the infected premise is covered by another insurance policy that provides compensation for C&D costs, a second insurance policy would not pay the claim or pay only the portion not covered by another policy.
- 6. *Minimization of loss* the insured must try to minimize, wherever possible any loss that occurs on insured property.
 - Given the time sensitivity of the requirement to C&D an infected premise, service
 providers may "inflate" costs or time to complete the process. Appropriate
 benchmarks for the standard costs of infected premise C&D would be
 established.
 - The use of a per bird value to compensate for infected premise C&D costs serves as a buffer to minimize "gouging" by service providers.
- 7. **Proximate cause** Proximate cause literally means the "nearest cause" or "direct cause". This principle is applicable when the loss is the result of two or more causes.
 - In the case of NAI, laboratory confirmation of the presence of NAI is required prior to any action taken which would lead to the requirement for C&D.

The cost of infected premises C&D are consistent with the principles of insurance and meet the insurability test. An actuarial assessment completed by JSCP also provides further assurance that the risk can be insured.

Designing an Insurance Product

What does the insurance product need to look like to be acceptable to the majority of industry is the question to be answer in this section. In order to be acceptable, it must be simple and easy to understand, along with being reasonably priced (not costing significantly more than simply the cost of levy proceeds to a common pooled fund).

What must it cover?

Consistent with sound marketing policy, the risk to be covered is the extraordinary cost of infected premises C&D. Through experience gained with previous NAI events, the industry or government has borne these costs not covered under the *Health of Animals Act* for birds ordered destroyed. For the 2014 HPAI, the Agri-Recovery Program specified costs eligible for payment:

- Available to CFIA declared infected premises within the designated control zones.
- Enhanced cleaning and disinfection costs, including but not limited to:
 - BHT removal
 - Pressure washing
 - Additional equipment rental
 - Extraordinary labour
 - Extraordinary management
 - Miscellaneous supplies and materials

Guy Carpenter undertook a Risk Transfer Program Analysis to identify and describe the primary rating components (scalability, exposure rating, deductible and enrollment) required for the insurance product and applied them to four options for coverage. The four options considered were:

- Percentage of total loss
- Fixed dollar value
- Fixed dollar value per bird
- Fixed dollar value per bird + % of loss of excessive eligible costs

The review identified the fixed dollar value per bird as the option with the highest rating. The option is easy to apply by providing simple adjustment advice (i.e. quota placements) that is easily adjusted at the time of loss, thereby minimizing costs.

The variability of barn types and scales within and between sectors add a level of complexity that makes it difficult to set fixed dollar value coverage or to establish an appropriate percentage of total loss value. Providing insurance coverage based on either of these two options would significantly increase the administrative and adjusting costs for insurance coverage.

Are the costs acceptable?

Based on past experience, JS Cheng and Partners (JSCP) developed a model to simulate losses from various types of NAI discoveries. JSCP was able to establish the frequency and average claim size from any given type of NAI discovery. Using the costs described in the Options section JSCP was able to establish base premiums to cover expected losses. The base premium includes the annualized expected loss, adjuster expenses, administration and management cost (\$63,500 per year) and reinsurance (estimated and not based on actual reinsurance industry quotes). It does not include a premium load for Fund growth. Annual base premiums by sector are as follows:

Breeders
Broilers
Layers
Turkeys
\$21,316 or \$0.0275 per bird
\$37,661 or \$0.0004 per bird
\$113,947 or \$0.0365 per bird
\$25,076 or \$0.0080 per bird

The cost of insurance premiums per JSCP as a percentage of the annual levy for each sector is very low:

Breeders 1.25%
 Broilers 0.84%
 Layers 0.51%
 Turkeys 2.41%

Is it actuarially sound?

JSCP conducted an actuarial assessment of the feasibility of an insurance company to insure infected premises C&D costs using BC data after an NAI outbreak. JSCP concluded that it was feasible to insure the losses provided that proper levels of reinsurance were purchased along with at least \$1 million in start-up capital and an initial net retention of no more than \$250,000 per year and preferably \$100,000 per year.

Is it administratively feasible?

The federal AgriRisk Initiative has provided funding to various industry groups to examine and develop options to provide insurance coverage for losses due to NAI, including the BC Poultry Association. The work funded includes looking at the administrative requirements to transfer the risk. Adopting per bird coverage based on quota placements make adjusting a relatively straightforward exercise. Loss is determined by CFIA ordered destruction of the birds on an infected premise.

Adopting an insurance based approach would require additional administration. The final design of the insurance and the form of delivery mechanism utilized will affect these costs. An estimate of \$63,500 has been included in the actuarial analysis for premium setting purposes.

Can the excess loss be reinsured?

JSCP has recommended \$5 million in stop-loss reinsurance cover to protect the fund. Interest has been expressed by reinsurance companies in the past in response to work done by the BCPA to provide quotes on reinsurance. Existing poultry insurance products have been able to successfully secure reinsurance for the range of insurance products offered. It is reasonable to expect that reinsurance can be secured for a BC Infected Premises C&D Cost Recovery Fund.

Sound Marketing Policy Considerations

Do the specific components of an insurance product fit within the requirements of sound marketing policy? The boards and commission already use insurance to cover risks. Providing coverage for extraordinary cost of infected premise C&D to facilitate the recovery from a NAI discovery provide an unpredictable level of risk to the operations of the boards and commission. Securing insurance for the Fund will enable the boards and commission to return to a system of orderly marketing in a timely manner.

Legislative Authorities

As discussed in the Phase 2 Report, recent amendments to the *NPMA* enable the boards and commission to require producers to maintain insurance against losses resulting from the interruption or termination of production for any reason.

Does the legislative authority under the *NPMA* extend to enabling the boards to purchase insurance or fund an insurance program? While not explicit, the *NPMA* contains provisions to enable boards and commissions to use retained levy proceeds "to pay costs and losses incurred in marketing a regulated product⁴". The boards and commission currently purchase insurance to cover risks to their operations. Covering the uncertain costs of infected premises C&D through insurance could be added.

It could be inferred that the use of levy proceeds to purchase insurance "to pay costs and losses" is enabled. The problem that arises is that the BCBHEC and BCEMB have this power set out in their respective marketing schemes, however this power is excluded from the BCCMB and BCTMB marketing schemes. As such is can be argued that the BCCMB and BCTMB do not have the explicit authority. The lack of express authority by the BCCMB and BCTMB expose them to the risk of challenge.

⁴ Natural Products Marketing Act, Section 11 (1) (o), Powers of marketing boards and commissions

On the other hand, the BCCMB and BCTMB have the authority "to use any moneys receive by the board in carrying out the purposes of the scheme, and in paying the expenses of the board, and in paying to the BC Chicken Growers' Association/British Columbia Turkey Association any portion or all of the expenses incurred by the said association with the authority of the board in carrying out the purposes of the scheme"⁵. It can be argued that if the boards were to require disease insurance as part of the producer licence and if the associations were to provide insurance for the cost of infected premises C&D and paid the premiums for the insurance on behalf of their grower members, they would be incurring an expense to carry out the purpose of the scheme, i.e. to address the mandatory disease insurance requirement. The BCBHEC and BCEMB do not have an equivalent power listed in their respective marketing schemes.

The *NPMA* is silent on the ability of the boards and commission to purchase insurance. Insurance is a risk management tool used by organizations to cover unexpected risks to their operations and is currently used by the boards and commission.

With respect to establishing and maintaining an insurance company to provide insurance for the cost of infected premises C&D, the *NPMA* is silent on this matter. Insurance is regulated by the province under the provisions of the *Insurance Act*. The *Insurance Act* does not preclude the poultry associations, boards or commission from forming an insurance company.

Industry Competitiveness Considerations

How would mandatory insurance affect the competitiveness of the BC poultry industries? With British Columbia acknowledged as being the high cost of production area for poultry in Canada, the requirement for mandatory insurance would add to the cost structure. Will the added cost adversely affect the competitiveness of growers, producers and processors? Is the cost of covering infected premise C&D prohibitive or would it further erode the competitiveness of the BC poultry industry?

While formal decisions by each board and commission have not yet been made, the boards and commission have affirmed the need to have a mechanism to cover the costs of infected premises C&D. The cost to establish an Infected Premise C&D Cost Recovery Fund was set out in Option 1 and 2. Apart from the upfront initial capitalization of the Fund, the annual costs would be approximately \$200,000 annually for an insurance based approach, and a higher or lower value depending on board and commission decision for a self-insured approach. The cost implications will vary between sectors. As a percentage of annual levy, the cost of the insurance based approach as measured by annual premium divided by annual levy ranges from 0.51% in eggs to 2.41% in turkeys. The low percentage would seem to be insignificant in terms of the levy and even lower as a percentage of total costs of production.

Broiler Hatching Eggs

The BCBHEC has a Reserve for the Unforeseen with a balance at December 31, 2016 of \$624,574. The Reserve for the Unforeseen includes a \$167,000 assigned security to the Canadian Hatching Egg Producers to cover potential future assessments for over allocation production. The BCBHEC also has a Restricted ("Ontario") Fund of \$1.183 million. The two sources of funds provide the BCBHEC with the capacity to meet its fiscal obligations for the initial capital and annual contributions or premiums without the need to raise the levy.

⁵ British Columbia Chicken Marketing Scheme, 1961, B.C. Reg. 188/61 and British Columbia Turkey Marketing Scheme, B.C. Reg. 174/66

It appears that the BCBHEC could utilize the above funds to participate in an industry-wide Fund with little to no impact on cost competitiveness of the hatching egg sector and no resulting impact on the cost of chicks supplied to the broiler industry as a direct result of implementing either mandatory insurance or establishing the Fund.

Broilers

The BCCMB has a Restricted Contingency Fund. The Restricted Contingency Fund is pursuant to Part 15 "Distribution of Board Operating Surplus" of the General Orders, to which the Board has established a fund represented by cash and cash equivalents in the minimum amount of \$2,000,000 and not to exceed one year of budgeted Board expenses, to be used to fund expenditures for unforeseen circumstances. Any amount deemed to be in excess to the set level of the contingency will be distributed to growers in proportion to the amount of the levy paid by a grower. The Board has reserved the right to change the amount required in the Restricted Contingency Fund and/or the levy rate at any time. The balance of the Restricted Contingency Fund at December 31, 2016 was \$2,517,676. The Restricted Contingency has the capacity to meet chicken grower fiscal obligations for the initial capital and annual contributions or premiums without the need to raise the levy. In recent years, the board has returned a portion of excess levy in accordance with policies to eligible growers.

It appears that the BCCMB could utilize the above funds to participate in an industry-wide Fund with little to no impact on cost competitiveness of the broiler sector and no resulting impact on the cost of chicken or on the competitiveness of the processing sector.

Layers

The BCEMB has created a formal contingency which will be funded over the next few years. Currently, year over year, the BCEMB reports excess revenue over expenses greater than \$1 million which could be used in the event contingencies arise. The BCEMB has in the past increased the producer levy to generate funds for specified purposes, as was the case in 2004 to cover the egg industry share of infected premises C&D costs.

The layer industry carries the majority of the risk but appears to have sufficient annual levy revenue to accommodate the initial capitalization and annual premium or Fund growth contribution. This will need to be assessed more thoroughly by the BCEMB to determine whether or not an increase in levy and the impact on competitiveness this would have.

Turkeys

The BCTMB has an Internally restricted fund which includes a Reserve for self-insurance. The goal of the Board is to have three months of operating expenses along with \$750,000 for self-insurance in case of any disease issue that may affect the turkey industry in the province. In 2016, the Board was in excess of these amounts and paid a rebate to growers of \$132,509 from the Unrestricted fund.

Given that the BCTMB has already reserved funds for disease issues, they have sufficient financial capacity to meet both the initial capital and annual premium/contributions to an industry-wide Fund. There would be limited to nil impact to grower cost competitiveness and processor competitiveness.

<u>AgriRisk Initiative – Administrative Capacity Building</u>

The federal government through Agriculture and Agri-Food Canada's AgriRisk Initiatives program supports the implementation and administration of new risk management tools for use in the agriculture sector. The Administrative Capacity Building component is a federal-provincial cost-shared portion of the program with two main objectives:

- To support pilot administrations during early years of delivering new risk management tools.
- To demonstrate the operational viability of new risk management tools in order to attract and secure private sector support.

The boards and commission could consider accessing available funding under the AgriRisk Initiatives Program as a means of providing seed capital for the Fund and minimize the upfront costs to producers.

Conclusions

The cost of infected premise C&D meets the insurability test and an insurance product can be designed on an actuarially sound basis. The *NPMA* enables the boards and commission to use levy proceeds to "cover costs and losses incurred in marketing a regulated product". This power can be viewed as enabling the boards and commission to establish an Infected Premise C&D Cost Recovery Fund. While this power is not included in the BCCMB and BCTMB marketing schemes, there are alternate provisions that could enable these boards to establish the Fund; the power contained in the marketing schemes to use levy proceeds to pay association expenses in carrying out the purposes of the scheme.

It does not appear that the *NPMA* or the enabling powers provided to the boards and commission under their respective schemes preclude the boards and commission from using levy proceeds to pay to transfer the risk of the Fund to a third party insurer. To minimize the risk of successful challenge of the Fund, the boards and commission should seek consistency in the powers afforded under their respective schemes and seek BCFIRB confirmation of the interpretation of the enabling powers to establish the Fund; i.e the BCCMB and BCTMB to seek amendments to their respective schemes to either have the explicit exclusion of the *NPMA* section 11 (1) (o) (iii) replaced with the enabling authority.

The *NPMA* is silent on whether or not the boards and commission can own or participate in an insurance company with the intent of providing insurance for infected premise C&D costs. Insurance is regulated by the province under the provisions of the *Insurance Act*. The *Insurance Act* does not preclude the poultry associations, boards or commission from forming an insurance company. Demonstrating how the boards' and commission's ownership or participating in an insurance company fits within the context of sound marketing policy will need to be established.

The analysis of the benefits, costs, advantages and disadvantages point to using a risk transfer mechanism as being the best way for the poultry industry to cover the cost of infected premise C&D. Transferring the risk provides certainty and predictability for the industry in overcoming challenges of the cost of infected premise C&D in returning to a system of orderly marketing in as short of time possible following a NAI discovery. While the self-insurance model has appeal in the boards and commission maintaining utmost control over the funds, it also carries a

greater overall financial cost to the industry as well as uncertainty with respect to the availability of funds in the event of a catastrophic loss or back to back NAI discoveries.

Recommendation

Option 2B – Boards and Commission assume the "insured party" role.

It is recommended that the boards and commission pursue a risk transfer mechanism whereby they are the insured party as it provides a more efficient and effective approach than requiring licenced producers to maintain insurance against losses for notifiable diseases. Acceptance of the responsibility to cover the costs associated with infected premises C&D through the use of levy proceeds is consistent with the enabling authorities under the *NPMA* and will enable the boards and commission to return to a system of orderly marketing in a timely manner following a NAI discovery.

<u>Strategic Considerations</u> – The recommended option is consistent with the need for the boards and commission to have a response mechanism to the extraordinary cost of infected premise C&D in the event of a NAI discovery, given the federal and provincial government stated position to no longer consider NAI in BC to be eligible for Agri-Recovery funding. The response is necessary to enable the boards and commission to return to a system of orderly marketing as quickly as possible following a NAI discovery.

Internalizing the cost to the operations of the boards and commission and using a risk transfer mechanism improves the ability of the industry to address other risks and challenges with the continued evolution of the BC Poultry Risk Mitigation Strategy.

<u>Accountability Considerations</u> –Grower/producer accountability to the whole of the industry is enhanced with a mechanism to cover the cost of infected premise C&D in a number of ways:

- Any financial impediment to C&D of the infected premise is removed.
- The costs of insurance by sector are known.
- Annual financial reporting and accounting is available to the industry.

<u>Fairness Considerations</u> – All licenced poultry producers and the industry as a whole benefit from the ability to return to production in a timely manner following a NAI discovery. Sharing the cost of infected premises C&D in accordance with the risk exposures by sector, provides a fair distribution of the costs. The cost of the Fund/insurance would be based on an actuarial assessment of the risk. The overall industry risk can be quantified by sector, enabling the split of the risk between sectors and the ability to establish cost shares based on the risk.

The broiler sector may contend that due to short production cycles the probability of being declared and infected premise would be extremely limited. However, broiler growers within an Infected Zone during a HPNAI discovery may test positive and thus be required to undertake extraordinary C&D. Further, given the external to the province markets for BC chicken, the broiler industry would benefit from a more rapid declaration of freedom from NAI to resume export trade.

<u>Effectiveness Considerations</u> – It has been established that there is a need for the boards and commission to fill the gap in coverage for the cost of infected premises C&D following a NAI discovery. Having a comprehensive, clear, simple and cost-effective approach to providing coverage facilitates the rapid initiation and completion of infected premise C&D and the resulting ability of the industry as a whole to return to a system of orderly marketing. One producer of an

infected premise without the financial means to undertake the required C&D can hold the entire BC poultry industry in abeyance from returning to a system of orderly marketing in a timely manner.

Internalizing the cost of infected premises C&D within the operations of the boards and commission removes the uncertainty of growers/producers with respect to who will shoulder those costs and will affect more rapid response and recovery of the industry as a whole. From a regulatory and administrative design perspective, having the boards and commission carrying the role of the "insured" as opposed to requiring licenced producers to maintain insurance against losses resulting from NAI is a simpler approach.

<u>Transparency Considerations</u> – A risk transfer approach will result in a documented accounting of what is covered, the cost of the coverage and who will pay how much and establishing performance measures. The expected compensation is also established by way of a formal contract/agreement. The cost of risk transfer and how it affects the levy paid by growers/producers will be documented as will the cost of management and administration of the Fund relative to the cost of claims.

<u>Inclusiveness Considerations</u> – The risk transfer option enables all sectors working collectively together to a common outcome; sharing the cost relative to risk to return the industry as a whole to system of orderly marketing in a timely manner. In the event of the need to increase the levy, consultation with other stakeholders, in particular the processing sector will be required to ensure that competitiveness of the sector will not be compromised as a result of any levy increase to accommodate the response.