

# BC BROILER HATCHING EGG COMMISSION

# APRIL 2020 NEWSLETTER

## INDUSTRY STATISTICS

### YTD Hatchability

84.0 %

### Average Lay Cycle End

56 weeks

### Average Breeder Price

Female: \$10.45

Male: \$14.04

### 2020 Audit Stats

Total Premises to Audit: 56

Premises Completed: 12 / 56

### Hatching Egg Tip

See the attached document from the American Association of Avian Pathologists on “What we know about avian coronavirus infectious bronchitis virus (IBV) in poultry – and how that knowledge relates to the virus causing COVID-19 in humans.”



## YELLOW BIOSECURITY ALERT

Please see the attached alert from Christine Koch, Manager, BC Poultry Association.

## OFFICE UPDATE

The Commission office will continue to be closed due to COVID-19. All Commission staff are currently working from home; the On-Farm Team is continuing to complete on-farm operations. If you do not want the on-farm team on-site at this time, please email the Commission so we are aware.

## COVID-19 PUBLIC SUPPORT APP

This is a new app from the Ministry of Health that allows British Columbians to conduct self-assessments. <https://bc.thrive.health/>

## BC AGRICULTURE COUNCIL COVID-19 UPDATE

Please see the attached document from BCAC regarding COVID-19.

## CHEP – COVID-19 – INFORMATION FOR PRODUCERS

Please see the attached document from CHEP regarding COVID-19.

## CHEP AGRISKILLS

Please see attached document on the new CHEP Agriskills learning platform.

## THE COMMISSION WISHES ALLAN & DIANNE MULDER ALL THE BEST IN THEIR RETIREMENT

Allan Mulder has retired as a Hatching Egg Producer and Commission Member. The Commission wishes to thank him and Dianne for their time and commitment to the Industry and wishes them both well!

## BCBHEC WEBSITE – PRODUCER ZONE

The Producer Zone of the website has been updated with all current documentation. Please take time to familiarize yourself with the new layout. If you are unsure what your username and password are please contact Naylene ([naylene@bcbhec.com](mailto:naylene@bcbhec.com)).

## POSTPONED EVENTS

BC Agriculture Women’s Network – has been postponed until further notice.

BC Poultry Symposium – has been postponed until further notice.

Pricing Orders

Period	Live Chicken	Hatching Eggs	Saleable Chicks	Day-Old Broiler Chicks
A-157	1.647 \$/kg	556.20 ¢/doz	57.94 ¢/chick	76.87 ¢/chick
A-158	1.691 \$/kg	572.19 ¢/doz	59.60 ¢/chick	78.52 ¢/chick
A-159	1.707 \$/kg	574.59 ¢/doz	59.85 ¢/chick	78.77 ¢/chick
A-160	1.697 \$/kg	598.71 ¢/doz	62.32 ¢/chick	81.26 ¢/chick
A-161	1.694 \$/kg	600.92 ¢/doz	62.55 ¢/chick	81.49 ¢/chick
A-162	1.694 \$/kg	602.95 ¢/doz	62.76 ¢/chick	81.70 ¢/chick

Production Cycles

Period	Start Date	End Date
A-157	Jun 9, 2019	Aug 3, 2019
A-158	Aug 4, 2019	Sept 28, 2019
A-159	Sep 29, 2019	Nov 23, 2019
A-160	Nov 24, 2019	Jan 18, 2020
A-161	Jan 19, 2020	Mar 14, 2020
A-162	Mar 15, 2020	May 9, 2020

**Good afternoon,**

**The BC Poultry Association is recommending to the four poultry boards and commission that all their member farms immediately move to yellow biosecurity status if they have not already done so.**

**Please let your producers know the increase in biosecurity is in response to a human health issue rather than a bird health issue. In addition, we would like to minimize the potential of a secondary crisis of an avian influenza (AI) outbreak during these times.**

**The yellow biosecurity standards are copied below and attached as Word and PDF files for your convenience.**

**Please contact me if you have any questions.**

**Regards,**

**Christine Koch, Manager  
BC Poultry Association  
Cell: 604 866-7600  
E-mail: [koch.c@telus.net](mailto:koch.c@telus.net)**

## **Heightened Biosecurity “Yellow”**

These measures are above mandatory standards and should be applied when there is a heightened disease risk or other threats in your region within BC.<sup>1</sup>

### **Controlled Access Zone (CAZ)**

- CAZ barrier should be closed at all times
- Restrict CAZ access to all unnecessary vehicles
- Establish a parking area outside of your CAZ
- Implement an “Essential Visitors Only” policy
- Minimize contact with all other avian (bird) and porcine (swine) species
- Minimize contact with all other poultry operations
- No mortalities and cull eggs to leave premise except on recommendation of a governing body (i.e. board/commission, veterinary, CFIA etc.)

### **Restricted Access Zone (RAZ)**

- Keep doors locked at all times when the building is not occupied by personnel
- Closely monitor flock health for unusual changes in feed and water consumption, increased mortality, and unusual behaviour. Report any of the above to your Veterinarian and commodity board
- Clean and disinfect traffic area and access points after each egg pick up
- Minimize contact between commercial poultry and wild birds & wild bird droppings

### **Equipment**

- All equipment and materials related to the production of poultry that enter or leave the CAZ, regardless of size or use, must be clean and disinfected

<sup>1</sup> These are not all of the BC Biosecurity Program requirements; please refer to your producer manual for more information. Note if your commodities On-Farm Food Safety Program requires more stringent biosecurity measures please follow them instead. The measures above are minimum requirements.



[www.bcac.ca](http://www.bcac.ca)  
P: 604.854.4454  
T: 866.522.3447  
F: 604.854-4485

UNIT 1 - 2650 PROGRESSIVE WAY  
ABBOTSFORD, BC V2T 6H9

## BCAC Update: Where to start re: COVID-19 (March 30)

*BCAC Members,*

*Please see the latest WALI Update below. Feel free to share with your members and relevant contacts.*

---

### **Government Protocols**

We are still waiting for provincial protocols to be released and for additional details and clarification on the [recently circulated federal requirements](#) for temporary foreign workers. This information will be shared as soon as it is available.

### **Preparing Your Farm for COVID-19**

Many producers are wondering, "Where do I start?". AgSafe BC has British Columbia-specific workplace COVID-19 resources for employers.

Here are a few to get you started:

1. [Employer Protocol for Pandemic](#)
2. [Agricultural Site COVID-19 Prevention Procedures](#)
3. [Health Questionnaire](#) (for farm visitors)

[Click here](#) for more AgSafe workplace resources.

### **Labour Opportunities with Go2HR:**

[Go2HR](#) has opened its tourism and hospitality focused job board to include the agriculture and food processing sector. This provides a unique opportunity to connect displaced tourism and hospitality employees (due to COVID-19 pandemic) with employment opportunities in agriculture.

Post your current job vacancies (for free!) on the leading tourism and hospitality job board:

[www.go2HR.ca](http://www.go2HR.ca)

BCAC/WALI will continue to link employers with labour opportunities during this challenging time.

### **Weekly COVID-19 Impact Survey:**

Please take a few moments to fill out this weekly survey to highlight the impacts of COVID-19 on your farm business. [Click here to complete the survey](#)

This information helps to inform the Canadian Federation of Agriculture and members (including [BCAC](#)) as we work with the government to support Canadian agriculture during this pandemic.

[Click here for more WALI updates](#)

---

**Western Agriculture Labour Initiative (WALI)** works with employers and governments to enable employers to find adequate domestic workers and continually improve working conditions for temporary workers. WALI is a wholly owned subsidiary of the [BC Agriculture Council](#). For more information, visit [walicanada.ca](http://walicanada.ca)

## COVID-19 – Information for Hatching Egg Producers

### **Reducing the risk of COVID-19 transmission**

- Current sanitation SOPs should continue to be followed in order to prevent transmission of COVID-19 from human to human and assess the workplace for extra cleaning/disinfection of high contact surfaces such as: doorknobs, touch screens, washrooms, sinks, etc.
- Employees should always practice social distancing where possible by remaining 2 meters or further from each other.
- Limit any non-essential visitors and continue to log visitors should they need to be contacted regarding any virus transmission. Visitors should declare if they been experiencing symptoms or have recently travelled outside the country.
- Create separate drop off areas for deliveries away from on-farm high traffic areas and housing. Add signage for drop off areas with specific instructions including contact information .
- Poultry producers should follow normal biosecurity measures as always, particularly if they have COVID-19 symptoms or are self-isolating due to contact with a COVID-19 case. In addition to avoiding contact with birds, this includes excluding visitors or workers who:
  - o have travelled abroad in the last 14 days
  - o are ill, especially with symptoms of COVID-19
  - o have been in contact with a confirmed or suspected case in the last 14 days.
- Practice proper hygiene:
  - o Wash hands frequently with soap and water for at least 20 seconds and use alcohol-based sanitizer if soap/water are not available
  - o Cough or sneeze into tissue or elbow, and dispose of tissues as soon as possible
  - o Avoid touching face with unwashed hands

### **Exposure to COVID-19**

- If an employee has symptoms or is diagnosed with COVID-19:
  - o The employee must return home if they are onsite or will not be permitted to come into work if they are at home
  - o Inform employee that they should talk to their local public health agency and/or physician to determine next steps and follow their advice when determining when it is safe to return to work.
  - o If employee tests positive, inform other employees and service providers that may have been in close contact that they may have been exposed to COVID-19 (without disclosing the identity of the positive testing employee where possible).

- There is no evidence that animals can become sick with COVID-19 or spread the infection. Human outbreaks are driven by human to human contact.
- Ensure there are contingency plans in place (ex. write down plans, directives and operations instructions in as much detail as possible, have extra trained employees ready to work, train current employees in other areas of work, designation a trusted person to take over in case of illness) to ensure farm operations can continue in case of employee shortage.

## **Resources**

Agriculture and Agri-Food Canada (AAFC) – COVID-19 Information for industry

<http://www.agr.gc.ca/eng/coronavirus-disease-covid-19-information-for-industry/?id=1584732749543>

CFIA – COVID-19 Information for industry <https://www.inspection.gc.ca/covid-19/cfia-information-for-industry/eng/1584462704366/1584462704709>

Canadian Agriculture Human Resources Council (CAHRC) – Information and Tips on COVID-19

<https://cahrc-ccrha.ca/programs/emerging-agriworkforce-issues/information-and-updates-coronavirus-covid-19>

Public Health Agency of Canada – COVID-19 Outbreak Updates <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>

## CHEP Agriskills

This is a comprehensive online course that has been developed for hatching egg producers and their employees.

Based on real-world best practices used on farms across Canada, this simple, practical training package ensures that even the busiest farms can successfully train their workers quickly and with no down-time.

This course was developed in consultation with hatching egg producers and industry experts across Canada. The training is based on National Occupational Standards, which are national employee benchmarks that define the knowledge and behaviours required for job success.

This course is free of charge and can be completed at the student's leisure.

There are 21 modules in all. Each module covers a topic which consists of a learning portion with information and a quiz on that topic. Quizzes only advance once the correct answer is selected for each question.

After each completed module and corresponding quiz there is a certificate awarded showing the student has completed that module topic.

Modules usually take between 10-40 minutes to complete depending on the student, topic, and size of module.

This is a great opportunity for employers and employees to further their knowledge in the industry.

To sign up, please send Kaitlyn:

1. Full Name of student
2. Email address of student

For questions and to sign up for CHEP Agriskills, please contact Kaitlyn Loewen by phone (604-850-1854) or email ([kaitlyn@bcbhec.com](mailto:kaitlyn@bcbhec.com)) to have an account created for you.





Dear *B.C. Poultry Symposium* & *WestVet* Participants and Supporters,

In light of recent and rapidly developing events related to COVID-19, the *Western Meeting of Poultry Clinicians & Pathologists* (WestVet) and the *B.C. Poultry Symposium* (BCPS) originally scheduled for May 5<sup>th</sup> & 6<sup>th</sup> in Abbotsford, B.C., will be postponed.

We will communicate & coordinate with our industry partners and supporters to reschedule these events later in the year. Further information regarding these dates will be communicated with you as soon as it's available.

Registrants and Sponsors will automatically be transferred to the new date. However, if you prefer to cancel your registration for a refund, please contact *Canadian Poultry Consultants* at 604-854-6600.

Thank you for your continued support of these educational meetings. Stay safe and healthy and we look forward to seeing everyone at these events later in the year.

Sincerely,

Drs. Kehler, Lin & Ritchie  
Canadian Poultry Consultants, Ltd.

[www.canadianpoultry.ca](http://www.canadianpoultry.ca) | [www.platinumbrooding.com](http://www.platinumbrooding.com) | [www.bcpoulttrysymposium.com](http://www.bcpoulttrysymposium.com) May 6<sup>th</sup>, 2020

March 23, 2020

## **What we know about avian coronavirus infectious bronchitis virus (IBV) in poultry — and how that knowledge relates to the virus causing COVID-19 in humans**

**Mark W. Jackwood, MS, Ph.D.**

Department of Population Health, Poultry Diagnostic and Research Center, College of Veterinary Medicine,  
953 College Station Road, University of Georgia, Athens, GA 30602, USA

To better understand the challenges associated with the COVID-19 disease in humans, poultry health professionals can draw on their many years of experience attempting to control avian coronavirus infectious bronchitis (IBV) in poultry.

It's important to emphasize that the COVID-19 virus (SARS-CoV-2) is *not* associated with poultry or poultry products. Coronaviruses are divided into Alpha-, Beta-, Gamma- and Delta- coronavirus groups. Coronaviruses are responsible for a wide variety of existing and emerging diseases in humans and other mammals (including food animals) as well as in birds (including poultry). Diseases associated with coronavirus infections cover a wide range including respiratory, enteric, neurological, renal and hepatic.

The coronavirus that affects poultry (IBV) and causes respiratory disease in chickens is in the avian **Gammacoronavirus group**. Avian viruses in the Gammacoronavirus group do *not* infect or cause disease in humans.

The COVID-19 virus is in the **Betacoronavirus group** along with SARS-CoV and MERS-CoV. It was previously shown that SARS-CoV does not infect or cause disease in poultry (Swayne et al. Emerging Infectious Diseases Vol. 10, No 5, May 2004). Because the COVID-19 virus belongs to the same group as SARS-CoV and uses the same ACE-2 host cell receptor, it is highly unlikely that the COVID-19 virus will infect or cause disease in poultry, but it remains to be scientifically proven.

Based on the knowledge at hand, and the current lack of any evidence of bird infections with the COVID-19 virus, poultry and poultry products are not considered to be a source of COVID-19 infection for humans. The COVID-19 virus is primarily spread among people via respiratory droplets that contain the virus, with infections occurring via the nose, eyes and mouth. Although highly infectious, it is an enveloped virus — one that is easily killed by soap and common disinfectants. Below are some frequently asked questions regarding coronaviruses.

### **Where do coronaviruses come from?**

Bats are widely accepted as the reservoir for mammalian (Alpha- and Beta-) coronaviruses. There are about 1,240 different bat species harboring as many or more different coronavirus types. SARS-CoV and MERS-CoV came from a bat reservoir, infected an intermediate host then jumped to humans. It is likely

that the COVID-19 virus originated from bats, Furthermore, preliminary data show some viruses isolated from bats to be close relatives. An intermediate host for the COVID-19 virus has not been identified yet.

The reservoir for avian coronaviruses, including IBV, is not clear. There are some closely related viruses in wild and domestic birds — pheasants, ducks, geese and pigeons, to name a few — but unequivocal evidence of a true reservoir is lacking.

### **Why is it difficult to produce a vaccine against coronaviruses?**

Protective immunity against a respiratory disease like infectious bronchitis (IB) in poultry or COVID-19 in humans requires a strong local immune response.

In poultry, we achieve this by using live attenuated vaccines, but live coronavirus vaccines are difficult to produce because attenuation often renders them unable to produce a strong local immune response. Attenuation is accomplished by passage of the virus in a laboratory host system (embryonating chicken eggs or cell culture), but there is a fine line between attenuation and maintaining the viruses ability to infect and induce an immune response. Over attenuation renders the vaccine safe but not immunogenic, whereas under attenuation will create a vaccine capable of inducing a strong immune response but may cause a severe vaccine reaction. Then there is the problem of back passage of the vaccine in the host leading to a pathogenic virus.

Based on our knowledge of producing vaccines against IBV, production of a live attenuated vaccine against COVID-19 with acceptable safety and efficacy may prove to be very difficult.

### **What about using killed vaccines against coronaviruses?**

There are killed (inactivated) vaccines against IBV for poultry, however they are also difficult to develop. Chemicals such as formalin or beta-Propiolactone used to kill the virus also can destroy the integrity of the spikes, thus yielding a vaccine that does not induce a protective immune response. In addition, for killed vaccines to be effective, they must be given after a live attenuated “priming” vaccine, which, as discussed above, has significant safety issues.

In humans, killed vaccines against respiratory viruses are used, for example against influenza virus, but this requires growing the virus to high titers, inactivating it and using safe adjuvants. This has proved difficult to achieve for human coronaviruses.

### **Why don't we have recombinant vaccines against IBV in poultry? And could a recombinant vaccine be developed for the COVID-19 virus?**

The coronavirus surface-spike glycoproteins are embedded in a lipid envelope and have conformationally dependent epitopes that induce neutralizing antibodies in the host. When the spike protein is removed from the virus envelope or when it is expressed in a laboratory system, those conformationally dependent

epitopes are not faithfully reproduced. Thus, vectors such as fowl pox and herpesvirus of turkeys have not been suitable vaccine platforms for expressing coronavirus spikes.

Spike protein production by the virus in a natural infection is very specific and difficult to mimic, thus other recombinant vaccines, such as DNA vaccines, RNA vaccines and subunit vaccines, do not accurately reproduce spike. Additionally, these vaccines usually do not stimulate adequate local immunity and have to be given many times to provide any protection.

Then there are genetically altered coronavirus vaccines derived from infectious clones. Making changes to the genome of the pathogenic virus to create a safe, attenuated live coronavirus vaccine that is still capable of inducing an effective immune response is complex and often results in non-viable viruses or insufficient protection. It can be a fast track to finding a vaccine candidate, but the safety of these live vaccines must be rigorously tested.

Fortunately, it is not all bad news. The immune system of a bird is very different from that of a human. What doesn't work in poultry may actually work well in humans. In addition, financially we can do a lot more in development and delivery of vaccines in humans than in poultry, where tight margins make it necessary for vaccines to improve the welfare of the flock while still yielding a satisfactory return on investment. The goals and performance parameters for human vaccines are obviously much different than production agriculture. Currently, there are many different coronavirus vaccines and platforms being developed or optimized for human use.

### **How do different serotypes/genetic types of coronavirus complicate vaccine development?**

In poultry, there are many types (serotypes/genetic types) of IBV that do not cross protect. Consequently, recovery from one type does not immunize the bird against another type. For this reason, we have had to develop a number of different IBV vaccines (Ark, Mass, Conn, DE, etc.) to control the disease.

Fortunately, there appears to be only one type of COVID-19 virus circulating in humans. However, full genome sequencing has shown that the virus is changing. A number of mutations have been observed, but none appear to be maintained at this time, which suggests they are not important for transmission or virulence. From a vaccine standpoint, only one type of COVID-19 virus circulating in humans means that only one vaccine type should be needed to protect against this disease.

### **Are there treatments for coronaviruses?**

For humans, we have antiviral drugs like oseltamivir (Tamiflu) for Influenza, but there have not been any successful drugs developed specifically for coronaviruses. Drugs against the viral-encoded proteases have been tried, as well as drugs that interfere with entry and egress of the virus from the host cell. These and many other potential antivirals are presently being tested by several companies.

Two drugs currently in the news, chloroquine and hydroxychloroquine are being examined for their ability to ameliorate COVID-19 infections. These drugs have been used against malaria, lupus and

rheumatoid arthritis for many years. Preliminary data out of China indicate that the drugs stop the spread of the COVID-19 virus in cell culture and are somewhat effective in treating humans. But, until controlled clinical trials are conducted, their effectiveness against COVID-19 remains a question.

It is likely that this pandemic will not be over anytime soon. In the meantime, follow the Centers for Disease Control and World Health Organization recommendations to protect yourself and your family. Poultry flocks do not appear to be at risk.

Web sites for additional information on COVID-19:

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

*Note: This statement was developed on behalf of the American Association of Avian Pathologists, an international association whose mission is to promote scientific knowledge to enhance the health, well-being, and productivity of poultry to provide safe and abundant food for the world. For more information, visit [aaap.info](http://aaap.info).*