

COVID – 19 DISASTER RESPONSE – NOTES FROM PRESENTATION

- Human Factors
- Evidence Based Information
- Welfare (People And Animals)
- Risk Evaluations
- Best Practices

“In preparing for battle I have always found that plans are useless, but planning is indispensable.”

- Dwight D. Eisenhower

Three methods for planning and development of farm disaster plans:

BEST: Planning in the absence of an immediate threat is the preferred but rarest method, because it provides everyone time to think through the plan in details, contact and identify resources. Devote effort and time to plan.

GOOD: Another common method for planning is in the immediacy right before an impending disaster. Since the public masses are using the same method, resources often scarce and difficult to find (generators, fresh water, fuel, food, and shelters).

POOREST: Planning during the actual disaster is a desperately necessary but biased method that is followed by a large contingent, as seen in the aftermath of media covered disasters, and COVID-19 is a prime example.

BEST OF ALL – even those who are uncomfortable with their planning so far can make improvements. In many disasters we say come up with an EVACUATION plan, and a SHELTER IN PLACE plan.

HOWEVER - Farm livestock evacuations present unique problems.

- Appropriate planning is essential. Shelter-in-place of animal evacuees depends on the incident, hazard, or threat and the safety of sheltering in place versus evacuating. *Evacuation is RARELY the best choice.*
- Evacuations are best coordinated with neighbors, friends, livestock associations and cattle/horse clubs, and county extension educators. Destination and methods of transport are sorted out well in advance of any need.
- Ensure destination has food, water, veterinary care (on call) and livestock handling equipment. Identify friends or communities who could house livestock during the disaster, including fairgrounds or other livestock evacuation locations. Is there a biosecurity and security plan?
- Make sure all livestock has some form of identification (microchip, ear tag, etc.)

Disasters affecting farms and ag affect the rest of us!

- The safety of the human food supply depends on the health and care of food-producing animals.
- Owners have personal and financial investments in their animals and facilities.
- Farm workers / owners may be injured or killed attempting to care for their animals in disasters.
- Agriculture, livestock, poultry and horses are a vital source of revenue and a huge portion of the economy.

BIG DISCONNECT FOR EMERGENCY MANAGEMENT: Protecting *human* life is first priority for disaster relief. Protecting property is of secondary concern. Thus, emergency management officials are not trained to deal with animals as property or the restoration of animal-related businesses. Farm owners/industry should work with emergency management agencies *before a disaster*.

Responsibility for animals ultimately lies with their owner or designated care provider.

ALL HAZARDS disaster planning does not attempt to make highly specific separate plans for all possible hazards, instead, *ONE PLAN addresses many possible solutions*

THERE ARE VERY FEW EXAMPLE PLANS OR RECOMMENDATIONS FOR BIOLOGICAL HAZARDS AT THE SCALE OF SARS-CoV2 REACTION

COVID-19 IS A GLOBAL PANDEMIC AND A **SHELTER IN PLACE** DISASTER

WHERE DO YOU START WITH PLANNING AND RESPONSE?

- EDUCATION of yourself. Learn about your industry and why downstream effects are going to effect your business (short and long term).
- DO AN INVENTORY of the disaster types that are statistically more likely to happen WHERE YOU LIVE - a place to start for both evacuation plans, and shelter in place plans, and build success in the face of disaster.
- Get involved in your community as a rational voice for animal issues and industry in disasters. Planning is ongoing in YOUR community – are you and your industry a PART of that? (maybe VIRTUALLY?)

What Are The Only Limits To Human Planning For Disasters?

IMAGINATION and MONEY.

DAILY BEST PRACTICES can be APPLIED IN DISASTERS:

- Implement NO SMOKING / NO ALCOHOLIC BEVERAGES policy within 100 m of facilities.
- Safety meetings* are held to discuss various challenges.
- Ensure all animals on the property are up to date on vaccinations, deworming, etc. (and paperwork). All animals have at least one form of permanent ID.
- All animals are quarantined when brought onto property (vet recommendations).
- Livestock trailers are properly washed out / disinfected between loads.
- All drivers have been taught to properly hitch, drive trucks / trailers, operate various equipment and tractors with safety equipment engaged.
- Security of the facility is emphasized (locks, inventory, etc.)
- Basic biosecurity is practiced by people at the facility – WASH YOUR HANDS! COVER YOUR COUGH! WEAR PPE! STAY HOME IF YOU ARE SICK!

** Safety meetings monthly / quarterly are an excellent way to get your staff involved in preventing injuries, problems with maintenance, and issues with handling or procedural safety. They often come up with the BEST SOLUTIONS if asked!*

BEST MAPS AND PAGES TO GET UP TO DATE INFORMATION ON COVID-19

Johns Hopkins Map:

<https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

World Health Organization Map:

<https://experience.arcgis.com/experience/685d0ace521648f8a5beeeee1b9125cd>

CDC WEBSITE FOR COVID-19:

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

Coronavirus disease (COVID-19): Information for industry

<https://www.inspection.gc.ca/information-for-industry/eng/1584462704366/1584462704709>

Canadian Federation for Agriculture:

<https://www.cfa-fca.ca/resources/resources-on-covid-19/>

Canadian Veterinary Medical Association

<https://www.canadianveterinarians.net/>

Special notes for those who work with farm animals:

- While a recent study suggests that the virus that causes COVID-19 may have the potential to infect some types of animals, similar to what is known for SARS-CoV, there is **currently no evidence that other domestic animals can be infected** with COVID-19 virus or can be a source of infection to people. **There are still many unknowns about this newly emerged coronavirus and this is an area that remains to be studied and understood.**
- Those handling live animals and animal products should practice good personal hygiene, including frequent hand washing after touching animals and animal products. They should consider wearing protective gowns, gloves, masks while professionally handling animals and fresh animal products. Equipment and working stations should be disinfected frequently, at least once a day.
- Protective clothing should be removed after work and washed daily. Workers should avoid exposing family members to soiled work clothing, shoes, or other items that may have come into contact with potentially contaminated material. It is therefore recommended that protective clothes and items remain at the workplace for daily washing.

How will RISK change in COVID-19? TRAFFIC JAM WARNING!

Demand remains a critical risk. Drastic measures are in place - restaurants are closed down across North America, people are working from home due to pandemic (COVID-19) so demand is changing quickly.

The effect of the changes that are just now taking place. Restaurant distributors have yet to see orders drop, which will cause processors, packers, then producers to be impacted.

Economic data has yet to catch up with what's happening, but the equity market drop is a clear indicator that markets think we are heading for a major contraction.

The supply flow risk is impossible to avoid - workforce in plants, on the road and at farms are vulnerable to viral infection. Bottlenecks are occurring at ports in other countries as ships wait to be offloaded.

Supply chains - slowing and shortages occurring:

As logistics are disrupted, in some products, “panic buying” is affecting availability. As an example - on farms, veterinary associations suggest the potential for animal pharmaceutical products to be in short supply for some drug manufacturers.

If the virus spreads in agricultural areas, issues with farm product delivery and pickup will occur as workers and milk and animal haulers, feed truck drivers - stay home due to illness, caring for family members or school-age children. These same concerns will affect processors.

Slowdowns will impact fertilizer, fuel and other supplies’ movement and availability.

Currently - concerns with utilities are small – electricity, natural gas, propane – these sectors generally do a good job of contingency planning to buffer the impact of unforeseen events.

CANADIAN COVID-19 ECONOMIC RESPONSE PLAN – SUPPORT FOR CANADIANS AND BUSINESSES

<https://www.canada.ca/en/department-finance/economic-response-plan.html>

There are two levels of disaster preparedness for each facility and individuals to achieve:

1 - **personal preparedness** - the owner’s staff and family are capable of taking care of themselves, their loved ones and the animals to be able to evacuate, or shelter in place – depending on the disaster.

2 - **business preparedness** - resumption / contingency planning for the owner’s facility as a business, whether cow/calf ranch, livestock hauler, horse boarding facility, veterinary clinic, and / or livestock breeding farm.

(You are practicing these skills right now being on this webinar.)

KEEP IT SIMPLE! YOU KNOW YOUR FARM AND CIRCUMSTANCES BEST!

You need to communicate:

Weather radio (battery powered), two-way radio, push to talk/text/audio phone, Internet access (cell, tablet, etc.), and/or CB radio.

Update social media, website and phone messaging with up to date information.

Set up a phone/text messaging list to communicate your emergency plans and response information with clients, delivery personnel, suppliers, shippers, employees.

Emphasize partnerships with farms and suppliers across town, the province, nationally.

Clean / Sanitize contact surfaces:

Wipe down / clean / disinfect door handles and knobs, floor mats, fueling handles, steering wheels, and other commonly contacted surfaces.

Sanitize common gathering places, lobbies, office spaces, lunch rooms, coffee pot, locker facilities, etc.

Assign workers to stay in one area or drive one truck or equipment, then clean and disinfect at the end of the day - instead of switching locations several times in a day.

Consider ways to maintain social distance:

- Create separate drop-off areas by identification of a drop-off location for deliveries away from on-farm housing. Drop boxes are recommended before on-farm entry for smaller items, mail, etc.
- Create specific instructions for drop-off deliveries. Provide location and all procedures needed at the drop-off point. Signage makes it easy to identify drop-off points for drivers.
- Assign one person to coordinate deliveries – make a list of all point of contacts to assist with questions leading up to delivery and upon arrival.
- Practice distancing with delivery drivers. *Do not greet them with a handshake.* Keep a recommended distance of at least 6 feet.

Wave and be friendly! *Remind them you are doing your part to keep them healthy!*

Restoration of farms as businesses.

It is estimated that only 5 percent of small businesses affected by a major disaster ever recover to a functional state, often due to inadequate insurance coverage. Farms without good records have a difficult time making an adequate insurance claim.

Major concerns for small businesses in disasters include:

- Personnel availability
- Cash flow
- Continued income for employees
- Continued provision of quality care for animals
- Restoration of a functional business
- Changes in community infrastructure
- Customer, buyer and supplier loyalty

Many of these issues can be addressed before a disaster by obtaining adequate insurance coverage and entering into agreements with neighboring farms to share facilities and resources. In addition, farms may obtain financial assistance thru government programs. *In the past, farmers were unaware of the sources of funding available to them to help recovery.*

DO AN INVENTORY - WHAT IS YOUR CRITICAL INFRASTRUCTURE ?

- Water, natural gas, electrical service, fuel and transportation accessibility to the outside world.
- Employees, Suppliers, Buyers, Clients – relationships and backups.
- Equipment, Supplies, Feed/Forage provisioning.
- Electrical backups for specialty cooling/freezing assets for genetic material or maintaining drugs at the correct temperature, and for using computer or other electric powered assets.

Stranded barn owners in Hurricane Florence and Michael (2018 USA hurricanes) flooding were unreachable to the outside world and on their own until assistance arrived – in some cases 3 days or up to a week later.

What are YOUR VITAL STATISTICS? VULNERABILITIES?

- How do you do business if your inputs are slowed (feed, fuel, etc.)?
- If you can't sell your animals or animal products on time – what is the effect on your business?
- What are other options for your livestock?
- Do you have backup power, and are computer resources on the cloud?
- How do you do business if deliveries are slowed? Sales slow?
- How do you handle feeding and daily care?
- Are your vehicles ALWAYS fueled at least half full?
- How do you keep visitors channeled and protect biosecurity?
- How would your facility be affected if power lost was for ONE day?
- If employees failed to come to work? If employees are sick for a week? For 3 weeks?

WHAT ARE CLIENT EXPECTATIONS OF YOU? (Horse Example)

- Water, food/forage, shelter, *protection from damage or injury*, security, treatment, etc.

As part of a functional disaster plan, boarders should expect to sign a waiver with details of how YOU expect to solve evacuation or shelter-in-place issues as a part of normal board and care, *especially where they cannot be contacted or can't attend.*



18 MAR 2020 - SPRUCEHAVEN FARM, ONTARIO has closed doors to the public and Boarders. We will re-open when the state of emergency declaration has been lifted in Ontario COVID-19.

Make sure your insurance coverage addresses:

- Business Interruption (continuing expenses) – when it ends, what triggers the end
- Extra Expense (payment of overtime pay and relocation expenses)
- Loss of Income (consider “mobile loss of income” which provides coverage in case a piece of equipment or vehicle cannot be used)
- Personal Property (replacement value)
- Automatic Inflation
- Fire Damage (typically included in business packages)
- Water Damage (NOT typically covered in business packages - flood insurance?)
- Debris Removal/Cleanup
- Civil Ordinance Coverage (*provides coverage in case unable to function because of an act of government*)
- Comprehensive building and structure replacement
- Coverage of rented and leased equipment
- Interruption of power, heating/air and sewer
- Coverage of Worker’s Compensation
- General and Professional Liability (where applicable)

Farmer and Worker health.

Farmers / ranchers are older as a population. Unlike other industry workers, farm operators often are over 65 years and some are age 75 or older. Data from other countries suggest that COVID-19 infection is more severe for those 60 and older, *meaning that preventive and protective recommendations from public health experts are critical for our farming population.*

Even if the general population infection rate remains relatively low, some workers will get sick. It is highly likely that workers will need to coordinate care or stay home to care for children out of school, sick or elderly family members. *Fear about this virus and lack of correct information may lead to higher levels of absenteeism.*

Prepare on-farm workforce.

- Provide guidance for handwashing and handling materials touched by other people - make sure guidance is available and communicated to employees in native language.
- Stagger lunch times or provide additional space to increase distancing of employees.
- ***Make sure sick or exposed employees know to stay at home.***
- Inform employees of handwashing facilities and sanitizing materials throughout farm or facility.
- Encourage employees to practice social distancing during non-work hours.

Worker Safety / Personal Protective Equipment

There are already shortages of PPE (masks, gloves and other protective equipment) vital for operating a farm safely and keeping workers and animals healthy.

As a result of the current demands by the healthcare industry, N-95 respirator supplies are highly limited (dusty grain handling, safe chemical handling, etc.)

There are also concerns about availability of gloves which have now become commonplace in dairy operations as a protective means to improve milk quality and protect the health of animals and people.

Other disruptions and challenges to Farmers.

- Sparse populations and less frequent travel provide a natural social distancing for rural communities.
- School and college classes and services are being moved to be taught online. This may be difficult for rural residents as high-speed internet service is not available in some communities with a strong agricultural base.
- Hoarding of farm supplies is not recommended and could cause even greater problems for the sector.
- Prudent purchases of necessary inputs might minimize disruptions to your business.

WHAT ELSE IS IN THE WATER? PHISHING, HACKING, PREDATORY PRACTICES

Continuity of Business planning for your farm/ranch.

- All farms have Continuity of Business (COB) plans to keep operations running smoothly in case of any disruption. Review, update, or write a continuity of business plan for COVID-19.
- COB plans are critical for all sized operations - *small farms can less handle disruptions because owner(s) may be sole caretaker(s)*. Whether injury, illness, death, or COVID-19 threats – all producers and operators of livestock associated businesses should take a serious look at their operations and write down plans, directives and operational instructions in as much detail as possible.
- Share or Communicate the plan to whomever you designate or ask to step in, just as you would a will and associated directives. Some farms will pay this person, in other cases it may be a family member.

General farm information YOU WILL NEED

- Fields and acres under control of farm, including rented property
- Personal Contacts sheet – emails, phone numbers, names
- Key suppliers to the farm for feed, hay, supplies and equipment
- Key markets for farm products, including key contacts and relationships to marketers, auctions, etc.
- Next of kin or trusted person to be in charge should head of farm become incapacitated. (Make this a three-deep list in case two or more are unavailable)
- Banks or Co-Op – where to get a line of credit if needed, location of checkbook and credit card, etc.
- Names and numbers to contact your financial advisor, lawyer, location of wills and power of attorney

Livestock based Business information YOU WILL NEED

- Carrying capacity of fields for grazing and field grazing rotation plan
- Soil tests and soil health records
- Farm use of pesticide, herbicide and fertilizer records, license, storage

- Barn and facility layouts and functions
- Equipment location for both owned and leased equipment
- Animal inventory and age, and major services by age for each enterprise
- Breeding records location and plans
- Location of AI materials or contract with AI and other animal services (vet, farrier, etc.)
- Health records location and veterinary relationship record, including veterinarian contacts
- Feeding and nutrition records, including feeding plan by age group and life stage
- Processing, operations, hygiene programs and supplies
- Biosecurity plan / visitor plans for farm
- Key worker contacts (Part Time, Relief milkers, Seasonal workers, etc.)

Who Is Responsible for Farm-Level People and Animal Biosecurity?

- Owners have ultimate responsibility to protect the health of animals in their care, and employees under their purvey.
- Write a farm-level biosecurity plan (with veterinarians, extension specialists, etc.)
- Quick and simple measures built into everyday management practices can protect your farm from the costly consequences of animal disease.
- Biosecurity is a part of “whole-farm approach” to animal health management and protection of the health of family members, employees, and visitors.

CONSIDER A BIOSECURITY PLAN

- **National Farm-Level Biosecurity Planning Guide Proactive Management of Animal Resources**
- <https://www.inspection.gc.ca/animal-health/terrestrial-animals/biosecurity/standards-and-principles/proactive-management/eng/1374175296768/1374176128059?chap=0>
- **National Biosecurity Standards and Biosecurity Principles**
- <https://www.inspection.gc.ca/animal-health/terrestrial-animals/biosecurity/standards-and-principles/eng/1344707905203/1344707981478>
- **EXAMPLE: Canadian Beef Cattle On-Farm Biosecurity Standard**
- <https://www.inspection.gc.ca/animal-health/terrestrial-animals/biosecurity/standards-and-principles/beef-cattle/eng/1378825897354/1378825940112>



Join 14k member

Study Group

(*it is NOT A PRAYER GROUP!*) named
“Technical Large Animal Emergency Rescue”

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