POULTRY

2023

Canadian Livestock Transport

Canadian Livestock Transport
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AnimalHealthCanada

Acknowledgment

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Canada

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Introduction to Animal Health & Transportation

WHAT WE DO

This program was developed to provide skills certification and support for Canada's livestock and poultry transport sector.

HOW WE DO IT

This training program is aligned with the current Canadian regulation on animal transport requiring that any person involved in the transport of animals needs to:

- know and comply with the humane transport regulations
- be trained and competent to work with the species they are transporting
- comply with the Health of Animals Act and Health of Animals Regulations (HAR) – Part XII (Transport of Animals) by keeping records and collaborating with CFIA inspectors.

You will be provided with clear information on the regulations you need to know. You will be instructed to identify problems, assess risk, take proper actions, and find resources to go to when in doubt. You will be instructed on pertinent documents and how to interact with CFIA inspectors.

When you see this light bulb icon, you will know the information is important to remember!

WHY IS TRAINING IMPORTANT TO YOU?

EVERYONE INVOLVED IN THE PROCESS OF TRANSPORTING ANIMALS SHARES A RESPONSIBILITY.

Transportation is one of the protein production system's most critical and visible components.

Livestock and poultry are transported every day of the year across North America, and animal welfare is everyone's responsibility.

Under Canadian legislation, animal transport is a shared responsibility.

All persons involved in the transport of animals share responsibility under the law, including those who:

- plan the transport
- prepare animals for the journey (including food and water withdrawal)
- assemble animals
- catch animals
- load animals
- confine animals in a crate or conveyance
- move animals from the point of origin to their destination
- unload animals from the conveyance or container at their final destination.

Moreover, it has to be done right!

Humane transport is a shared responsibility of the law applying to all those involved directly or indirectly in the transport of live animals.

This includes, but is not limited to:

- animal owners
- producers
- buyers
- carriers
- exporters
- importers
- commercial carriers
- animal handlers
- processors
- assembly centres (auction markets, assembly yards, independent holding facilities associated with slaughter establishments)
- feed, water and rest (FWR) stations/locations.

Benefits of training are:

- improved knowledge
- improved consideration
- improved safety for both the handlers and the animals
- reduced livestock stress
- you always learn something new
- decrease in economic loss
- increase in public trust.

Note: Proof of training is not enough for the CFIA, you have to prove competency as well.

ANIMAL WELFARE

ANIMAL WELFARE IS PART OF EVERYDAY BUSINESS.

We must strive to ensure the viability of livestock and poultry production systems through awareness, certification and continuous improvement.

Employers should promote the philosophy that animal welfare is key to the success of their business and a responsibility of all employees.

All employees should be qualified and provided with education and training. Managers and employees must know all regulations, laws and quality assurance program expectations.

Livestock and poultry transport is an important and visible component of animal agriculture.

High profile

Animal welfare has evolved as a high-profile issue for every segment of the livestock and poultry industry.

Questions being raised

All stakeholders, including consumers and the public, are asking more questions and closely examining industry practices.

One way to reassure the public that we are doing the right thing is to demonstrate that people throughout the production system have been made aware of requirements and best practices and to strive for continuous improvement.

Transport links all aspects of the animal production cycle.

Transport best practices are part of the picture in many animal care programs and brand assurance programs. Not only is it visible to the public, but it is an area of concern for the entire value chain and customers.

What you do on the road impacts the perception of the public eye on many other stakeholders.

CANADIAN STAKEHOLDERS

Hog Producer

- In 2021 there were 14.03 million hogs on 7,635 farms in Canada. Farm cash receipts from the sale of hogs totaled $6.2 billion, 7.5% of total receipts.

Cattle/Bison/Elk Producer

- In 2021 there were 12.24 million cattle and calves, on 72,925 farms and ranches in Canada
  - o farm cash receipts from the sale of cattle and calves totalled $10.2 billion, 12.4% of total receipts
- 149,539 bison on 989 farms in Canada (source: 2021 census of agriculture).
- 29,655 farm raised cervids (deer and elk) on 402 farms.

Dairy Producer

- In 2021, there were 9,952 registered dairy farms in Canada. Dairy cattle population (dairy cows and heifers) was 1.4343 million head.
- The total net farm cash receipts from dairying was $7.39 billion. Milk production was estimated to 95.12 million hl.

Sheep Producer

- In 2021 there were 791,300 sheep and lambs, on 8,487 farms in Canada.
- Farm cash receipts for sheep and lambs totaled $249 million, 0.3% of total farm cash receipts.

Goat Producer

- In 2021, there were 253,278 goats on 4,801 Canadian farms.
- The goat industry can be segmented into three distinct sectors: chevon (meat), dairy (milk) and fibre (mohair and cashmere).
- 87,068 goats slaughtered in Canada. Over 99% of these goats were processed at provincially inspected establishments.

Chicken Producer

- In 2021, there were 2,823 regulated chicken producers in Canada that produced 1.30 billion kilograms of chicken (eviscerated weight).
- Overall in 2021, Canadian chicken production generated $3.3 billion, contributing 4.0% of cash receipts to farming operations.

Turkey Producer

- In 2021, Canada produced turkey products worth $397.1 million, contributing 0.5% of cash receipts to farming operations.
- In 2021, Canada produced 150.1 million kilograms of turkey (eviscerated weight).
- In 2020, there were 515 regulated turkey producers in Canada.

Egg Producer

- In 2021, there were 1,205 registered egg farms in Canada. The eggs in shell sold for consumption industry generated $1.4 billion in total farm cash receipts, contributing 1.7% of cash receipts to farming operation in Canada.

Meat Processing Industry

- Canada's red meat industry includes beef and veal, pork, lamb and mutton, goat, rabbit, horse, as well as venison and bison. The red meat industry had annual shipments worth $22.3 billion in 2019.

Canadian consumers (aged between 15 and 64) and making decision on meat

The Canadian agri-food system

- In 2020 employed 2.1 million people and provided 1 in 9 jobs in Canada, generating $139.3 billion (around 7.4%) of Canada's gross domestic product (GDP).
- Primary agriculture (GDP $39.8 billion, 2.1%, 269,300 jobs, 0.7% of population), food and beverage processors, food retailers and wholesalers, foodservice providers.

The Canadian population in 2020: 38.01 million people

- Food decisions are made 3 times/day.
- That's 27,519,772,140 food decisions/year by people between 15 and 64 years old (66.12%).

Sourced out of Statcan and Ag Canada

Canada's livestock transporters face several challenges, and it is essential to seek ways to improve continually.

Scientific research continues to deliver new information in many areas, such as:

- appropriate stocking densities for each weight class and age
- optimal travel distance and feed, water and rest intervals
- bedding type and quantity
- trailer design
- the role that driver experience and training plays in the welfare of animals being transported
- optimal conditions for loading and off-loading.

WHO IS IMPACTED BY THIS IMPORTANT RESEARCH?

Animals

- Appropriate stocking densities for each weight class and age.

Truckers & Animals

- Optimal travel distance and feed, water and rest intervals
- Trailer design
- Driver experience & training vs welfare of transported animals
- Optimal conditions for loading and off-loading.

As animal welfare practices improve, so will the conditions for the workers.

CLT CERTIFICATION PROGRAM

The Canadian Livestock/Poultry Transport certification programs are standardized courses offering certification that is recognized throughout Canada and the United States.

Industry Initiative

The program is led by an industry initiative to address the need for increased accountability and improved handling practices in livestock and poultry transport.

Industry Contributions

All segments of the Canadian livestock and poultry sectors (including producers, transporters, processors, provincial and federal regulatory advisors, researchers and other industry professionals) contributed to its development.

Certification Key Knowledge Areas

- Animal Welfare
- Importance of Animal Welfare in Transport
- Regulations and Code of Practice
- Animal Handling and Behaviour
- Contingency planning
- Biosecurity
- Transportation

Certification is offered for **poultry** and **livestock** (livestock includes cattle, sheep, goats, hogs, horses, bison, and elk).

Upon successful course completion, recipients are provided with proof of completion, and the certification is **valid for three years**.

TRANSPORT OF ANIMALS

Amended regulations for the transport of animals: Humane Transport.

In February 2020, training became mandatory for all commercial transporters per the Health of Animals Act Part XII.

It refers to the obligation of knowledge and skills.

The regulations require that the training includes the following:

- animal behaviour, handling and restraint
- how to assess an animal's capacity to withstand loading, confinement, transport and unloading
- space requirements
- methods for the loading, confinement, transport and unloading of animals
- contingency planning
- how to effectively monitor animals during loading, confinement, transport and unloading
- risk factors during transport.

Training is required and CLT is beneficial for the following people:

- livestock and poultry handlers
- dispatchers
- support staff involved in decision making
- catching and loading crews
- slaughter plant staff
- live animal importers
- producers
- transporters/carriers.

While they may not spend time working directly with animals, facility managers and key decision-makers also benefit from the knowledge gained from this course.

When key decision-makers are aware of the responsibilities and the laws and regulations, they are better equipped to support a culture of maintaining high standards for animal care. In addition, they better understand the challenges of transporting livestock and poultry and can support individuals tasked with their direct care daily.

1 IMPORTANCE OF ANIMAL WELFARE IN TRANSPORT

WHY CARE ABOUT ANIMAL WELFARE

This module will explain why Animal Welfare in Transport is essential to everyone.

As a transporter, you are not alone on the animal welfare journey, and we will show you how important you are to the welfare of the animal and to the success of the entire animal production sector.

INVESTMENT & TRAINING

Investment

The Canadian Industry has invested a lot of effort and engaged thousands of people in setting up, maintaining and improving animal welfare programs.

Training

We will briefly show you what is out there and how your Canadian Poultry transportation certification program merges with many animal care and quality assurance programs.

This certification is suitable for anyone involved in the animal transport process and its decision-making, such as haulers, producers, handlers, plant crews, loading crews and management.

It encompasses all aspects of the transport process: preloading, loading, time in transit and arrival at the destination.

ANIMAL WELFARE IN TRANSPORT

There is an obvious reason we all need to do the right things regarding animals under our care and responsibility.

However, there is much more to it; let's examine why.

"One Health" Concept

The World Organisation for Animal Health (WOAH, founded as OIE) defines animal welfare as a complex and multifaceted subject with scientific, ethical, economic, cultural, social, religious and political dimensions.

It is attracting growing interest from civil society and is one of the priorities of WOAH.

In simple terms, animal welfare means 'the physical and mental state of an animal in relation to the conditions in which it lives and dies.'

Five Freedoms

The guiding principles which inform the World Organisation for Animal Health's work on the welfare of terrestrial animals include the "Five Freedoms'. Developed in 1965 and widely recognized, the five freedoms

World Organisation for Animal Health
Founded as OIE

describe society's expectations for the conditions animals should experience when under human control, namely:

1. Freedom from hunger, malnutrition and thirst
2. Freedom from fear and distress
3. Freedom from heat stress or physical discomfort
4. Freedom from pain, injury and disease
5. Freedom to express normal patterns of behaviour.

Of course, keeping animals healthy, with low stress, while housed or transported under optimal biosecurity conditions contributes to their welfare and the welfare of others from the same species. Good animal welfare means good quality animal products and lower risks of spreading disease to other animals and humans (Zoonotic diseases).

WOAH calls this holistic approach: The "One Health" approach.

The "One Health" approach summarizes a concept that has been known for more than a century; that human, animal and plant health are interdependent and bound to the health of the ecosystems in which they exist.

They envisage and implement it as a collaborative, whole-of-society, whole-of-government approach to understanding, anticipating and addressing risks to global health.

Canada, being a WOAH member country, is a long-time supporter of the WOAH animal welfare principles and is also adhered to the "One Health" approach; expect to hear more about it in the coming years.

You can already see WOAH's impacts on governmental policies, programs and industry initiatives to meet international trade agreements.

Follow this link if you want to learn more about the **WOAH** Global Animal Welfare Strategy (**GAWS**).

WOAH Global Animal Welfare Strategy (GAWS).pdf

CONSUMER TRUST

Public Trust

Animal production and transport are part of our societal choices, and we have been given the privilege to work and grow doing what we like because most people trust that we are doing it right.

We call this our social licence, our public trust.

Engaging the Public

According to the Canadian Centre for Food Integrity's annual public trust research (2022), overall concern for animal welfare is relatively low, and Canadians are not highly engaged on this topic.

This issue, however, is essential in maintaining and growing public trust in Canada's food and agriculture system.

CONSUMER CONFIDENCE

Ensuring consumers are confident in the food system's approach to animal welfare is a top-three driver

of public trust. Yet, only three in ten are very confident about how the food system addresses this issue (60% moderately confident).

Overall concern about the humane treatment of farm animals has been consistent for the past three years (2020-2022).

This issue is among the lowest ranked compared to 18 other life (inflation rate, energy costs, health care costs, climate change, etc.) and food-specific issues.

Improving Levels of Concern

The consistently low level of concern may reflect trust and approval of current animal welfare practices, something to be fostered through continuous improvements and transparency.

Positive Impressions

When we think about it, animal transport is, for many, the only occasion someone will have to see a farm animal.

Let's make sure we keep this first impression as positive as possible!

INDUSTRY

Every segment of the food chain, from farm to fork, including animal transport, is liable to guarantee the best possible animal welfare conditions for the animal under their care.

Of course, good animal welfare practices will contribute to better performances and economic returns on animal products.

LIABILITY

All stakeholders in animal production (farm to fork) in Canada have adhered to or implemented their animal welfare programs.

Animal transport is involved at every step of animal production. Implications of those commitments took root from regulations, best practices, National codes of practices, customer requests, etc.

When transporting an animal both parties at the origin and destination are responsible for animals during transit and the transfer of care.

These decisions were taken under their obligations toward animal welfare.

Decisions & Actions

As an animal transporter, your decisions and actions impact your job and the commitments your employer has made towards animal welfare and significantly impact the senders and the receivers. It can substantially impact their liability, regulatory compliance, and public image.

Professionalism

It might not feel like it when you are driving alone on the road, but many stakeholders also rely on your professionalism and collaboration on their animal welfare journey.

THE ANIMALS

The primary beneficiaries of animal welfare are the animals themselves. No animal should have to endure abuse, wilfully induced or by neglect.

Our responsibility is to report any animal abuse to the competent authorities and to foster animal practices and husbandry that will optimize the **Five freedoms** mentioned above.

Animals suffer from inappropriate handling, and you need to understand the role you can play in optimizing their **Five Freedoms**.

As a transporter or someone involved in decisions surrounding their transit, you need to know the Five Freedoms.

1. **Freedom from hunger, malnutrition and thirst**
   - Plan your animal transport considering their last and next access to feed, water, and rest.
   - Evaluate their fitness to transport before loading them on board, so animals will make it to their destination in much better shape.
2. **Freedom from fear and distress**
   - Know how they react when handling them, and avoid panicking and balking. Cooperative animals are easier to handle.
3. **Freedom from heat stress or physical discomfort**
   - Transporting animals in passively ventilated trailers is a challenge during all seasons in Canada and needs to be planned around accordingly.
   - Know how to plan, react and be attentive to their needs during the entire transit.
   - During transport, animals are at your mercy, and you can control their comfort.
4. **Freedom from pain, injury and disease**
   - Be conscious they are sentient beings and not objects.
   - They feel pain, and they feel fear, they feel exhaustion, and they can get hurt.
   - Think of biosecurity as 'shall-do's' and not as 'have-to-do's' only when people are looking:
     - transport can be a disease dissemination vector and a source of injuries; you are also playing a part in their global health plan.
5. **Freedom to express normal patterns of behaviour**
   - Knowing their natural behaviour will facilitate your work and reduce avoidable stress for you and the animal(s).

Take full advantage of your learning to improve animal welfare.

Animal welfare does not add benefits to your job and the sector; it multiplies them while improving the reality of the animals.

REGULATIONS AND STANDARDS

NO ONE CAN IGNORE THE LAW.

If you are involved in transporting animals, you are expected to comply with all regulations pertaining to your tasks.

Framework

In Canada, our governments provide us with the legal framework of the animal welfare requirements in transport.

Industry Standards

From there, the industry sets standards to meet and exceed the regulations. These standards are the results of a consensus based on science and evidence.

Implementation

Commodity groups implement transportation regulations in audit standards and reinforce knowledge with training extension and collaboration.

NO ONE CAN IGNORE THE LAW

You must be knowledgeable, competent and trained to ensure your compliance with animal welfare requirements.

As a transporter or someone making decisions related to the transport of animals, you must know the regulations and standards.

Know what to do, do what you are expected to do, and prove it (records).

ANIMAL WELFARE IN TRANSPORT - WHERE DO YOU FIT?

The Canadian Industry has invested a lot of effort and engaged thousands of people in setting up, maintaining and improving animal welfare programs on its territory.

Your role will take you to primary farms, between farms, between farms and assembly yards, between farms and auction markets and to processing facilities.

All of these transportation events will impact the effectiveness of an animal welfare program and the ability to successfully implement the program.

So let's review what is out there and how you fit in.

HATCHERIES

National Farm Animal Care Council

Click the link to read the NFACC Poultry - Code of Practice

About this production Code and how it impacts you

Canada has a National Code of Practice for the Care and Handling of hatching eggs, breeders, chickens,

and turkeys. It serves as our national understanding of animal care requirements and recommended practices for the sector. In addition, it promotes sound management and welfare practices for housing, care, transportation, and other animal husbandry practices.

An entire section of this code is dedicated to transportation and guides the producer to make good decisions around transport. It covers the evaluation of transport, preparing for loading and transport, catching, loading, and unloading procedures, catching and loading/unloading equipment and containers, and facilities design and maintenance.

Amongst many essential requirements around transportation, the following requirements will concern you directly:

- poultry transportation is a shared responsibility between all stakeholders
- the producer must inform the transporter about any changes in flock condition prior to loading
- stakeholders should adjust loading, departure, and transit times or routes to avoid potential delays
- the flock and environmental conditions, as well as the expected journey duration, must be taken into consideration when loading birds for transport
- poultry must be protected from being overcrowded, injured, overheated, and exposed to weather extremes and toxic things while in transport
- poultry must be monitored en route, and changes made to ensure a positive welfare outcome
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe and easy access to maintained driveways and yards
- the transporters must have a contingency plan.

Canadian Hatchery Federation

The Canadian Hatchery Federation (CHF) animal welfare program was last updated in December 2020, and as of July 1, 2021, all CHF members must conduct annual audits under this program.

The program was developed based on the **National Farm Animal Council's** Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys.

This program covers those hatcheries that incubate hatching eggs used in poultry (meat) and egg production. In addition, the program covers care for hatching eggs (including those that have been incubated for a period of time) and chicken/poultry.

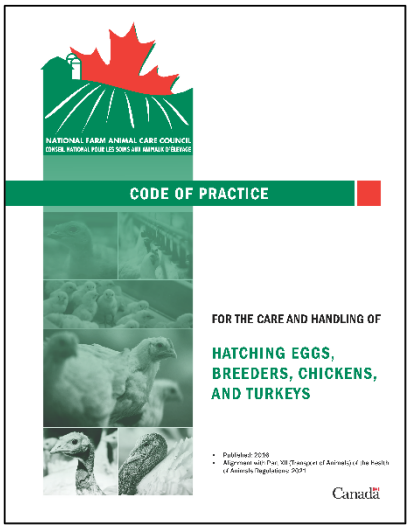
They are dedicating an entire section of the program to the holding of chicken/poultry prior to delivery and delivery.

Some requirements of their program directly target your collaboration and compliance as a transporter:

- chicken/poultry boxes must not be thrown, dropped, or tipped to the degree that will cause piling during movement
- before shipping, chicken/poultry must be evaluated to be sure that they are fit for transport
- acceptable temperature ranges must be established for each delivery vehicle, and vehicles must be capable of maintaining and monitoring this temperature. Environmental conditions in each delivery vehicle are maintained in the acceptable temperature range and are recorded
- delivery vehicles are well-maintained and properly cleaned prior to loading
- driver verifies temperature, water, and feed conditions are met (delivery procedures).

CHICKENS

National Farm Animal Care Council



Click the link to read the NFACC Poultry - Code of Practice

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An entire section of this code is dedicated to transportation and guides the producer to make a good decision around transport. It covers the evaluation of transport, preparing for loading and transport, catching, loading and unloading procedures, catching and loading/unloading equipment and containers, and facilities design and maintenance.

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- poultry transportation is a shared responsibility between all stakeholders
- the producer must inform the transporter about any changes in flock condition prior to loading
- stakeholders should adjust loading, departure, and transit times or routes to avoid potential delays
- the flock and environmental conditions, as well as the expected journey duration, must be taken into consideration when loading birds for transport
- poultry must be protected from being overcrowded, injured, overheated, and exposed to weather extremes and toxic things while in transport
- poultry must be monitored en route, and changes made to ensure a positive welfare outcome
- the transporters must have a contingency plan
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe, easy access to maintained driveways and yards.

Chicken Farmers of Canada

Click the link to read about the **Chicken Farmers of Canada - Animal Care Program:** CFC Animal Care

About this animal care program and how it impacts you

Chicken Farmers of Canada (CFC) has a comprehensive animal care program designed to demonstrate the level of care given to Canadian chickens.

The program was designed to complement CFC's Raised by a Canadian Farmer **On-Farm Food Safety Program (OFFSP)** and to provide assurance through documentation that farmers are meeting appropriate animal care standards.

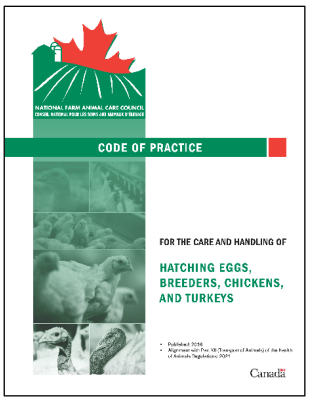
CFC's Animal Care Program addresses transport elements in the catching and loading section.

Transporters should also be aware of some of the following elements:

- at the time of catching, the welfare of the flock is a shared responsibility between the farm, the catching company, transporters and processors
- producers shall construct and maintain driveways and yards to facilitate unobstructed, safe and easy access to transport vehicles.

TURKEYS

National Farm Animal Care Council



Click the link to read the NFACC Turkey - Code of Practice

About this production Code and how it impacts you.

Canada has a **National Code of Practice** for the Care and Handling of hatching eggs, breeders, chickens, and turkeys. It serves as our national understanding of animal care requirements and recommended practices for the sector. In addition, it promotes sound management and welfare practices for housing, care, transportation, and other animal husbandry practices.

An entire section of this code is dedicated to transportation and guides the producer to make a good decision around transport. It covers the evaluation of transport, preparing for loading and transport, catching, loading, and unloading procedures, catching and loading/unloading equipment and containers, and facilities design and maintenance.

Amongst many essential requirements around transportation, the following requirements will concern you directly:

- poultry transportation is a shared responsibility between all stakeholders
- the producer must inform the transporter about any changes in flock condition prior to loading
- stakeholders should adjust loading, departure, and transit times or routes to avoid potential delays
- the flock and environmental conditions, as well as the expected journey duration, must be taken into consideration when loading birds for transport
- poultry must be protected from being overcrowded, injured, overheated, and exposed to weather extremes and toxic things while in transport
- poultry must be monitored en route, and changes made to ensure a positive welfare outcome
- the transporters must have a contingency plan
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe and easy access to maintained driveways and yards.

Turkey Farmers of Canada Flock Care Program

About this animal care program and how it impacts you

The **Turkey Farmers of Canada (TFC)** are proactive concerning animal and flock care. The first version of the **TFC Flock Care Program©** was distributed to all Canadian turkey farmers in the spring of 2007.

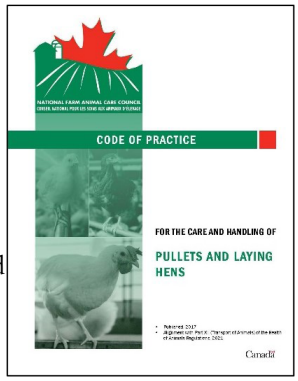
Since then, the **TFC Flock Care Program©** has been made mandatory for turkey farmers across the country and has been regularly updated to ensure it remains current with respect to scientific developments and regulatory requirements.

TFC's Animal Care Program addresses transport elements in the catching and loading section. Transporters should also be aware of the following elements:

- poultry transportation is a shared responsibility between all stakeholders
- loading densities are determined pre-loading through communication with the processor or transporter, taking into account the container floor space, bird size, environmental conditions and expected journey duration
- containers and equipment allow birds to be loaded and conveyed in ways that minimize stress and injury
- transport vehicles shall have easy access to maintained driveways and yard.

PULLETS & LAYING HENS

National Farm Animal Care Council



Click the link to read the NFACC Pullets & Laying Hens - Code of Practice

About this production Code and how it impacts you.

Canada has a **National Code of Practice** for the Care and Handling of Pullets and Laying Hens. It serves as our national understanding of animal care requirements and recommended practices for the sector. It also promotes sound management and welfare practices for housing, care, transportation, and other animal husbandry practices.

An entire section of this code is dedicated to handling and transportation and guides the producer to make a good decision around transport. It covers pre-transport planning, fitness to transport, handling and catching, loading and unloading and lastly, facilities design and maintenance.

Amongst many essential requirements around transportation, the following requirements will concern you directly:

- all parties involved in the catching and transporting process have a responsibility and obligation to ensure catching, transfer, and holding on-farm is undertaken in such a manner that minimizes stress and injury
- the transporters must be trained and competent
- the transporters need to be provided paperwork prior to loading to minimize delays in departure
- the transporters must be notified of changes in flock conditions prior to loading.
- poultry must be protected from being overcrowded, injured, overheated, and exposed to weather extremes and toxic things while in transport
- poultry must be monitored en route, and changes made to ensure a positive welfare outcome
- the transporters must have a contingency plan
- the average body weight and the actual number of birds to be shipped are provided to the transporter
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe and easy access to maintained driveways and yards.

Pullet Growers of Canada

About this animal care program and how it impacts you.

Click the link to read about the **Care of Pullets Guidebook**: Care of Pullets Guidebook

About this animal care program and how it impacts you

This **Care for Pullets Guidebook** is meant to provide Canadian pullet growers with the information needed to ensure that the pullets in their care are treated with respect and compassion.

An entire section of this program is dedicated to transportation and guides the producer to make a good decision around transport. It covers the role of the pullet grower, transportation guidelines, pre-transport planning, fitness to transport, handling and catching, loading and unloading, facilities design and maintenance and haulers.

You will be directly concerned by the following elements:

- all parties involved in the catching and transporting process have a responsibility and obligation to ensure catching, transfer, and holding on-farm is undertaken in such a manner that minimizes stress and injury
- the transporters must be competent
- the transporters need to be provided paperwork and instructions prior to loading to minimize delays in departure
- the transporters have to be communicated changes in flock conditions prior to loading
- the average body weight and the actual number of birds to be shipped is provided to the transporter
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe, easy access to maintained driveways and yards
- the hauler must ensure that the pullets are fit to travel and that the welfare of the pullets is safeguarded from the time that they are placed into the transportation crates until they are unloaded at their destination
- all transport systems must permit adequate ventilation and protect pullets from adverse weather, be thoroughly cleaned before carrying birds to a new site, be well maintained and have no features on the crates or vehicles that could injure the pullets
- the hauler should have a contingency plan for handling, catching or euthanizing pullets in case of emergency and drivers trained in its implementation.

Egg Quality Assurance/Animal Care Program

Click the link to read about the Egg Quality Assurance™ Certification (EQA™) for Canadian Egg Farmers: EQA

About this production Code and how it affects you.

The Egg Quality Assurance™ certification (EQA™) for Canadian Egg farmers is an industry-wide initiative that certifies Canadian eggs are produced according to strict food safety and animal welfare standards. Farmers must meet the requirements of the national Animal Care Program and Start Clean-Stay Clean® Program to receive and maintain their EQA™ certification.

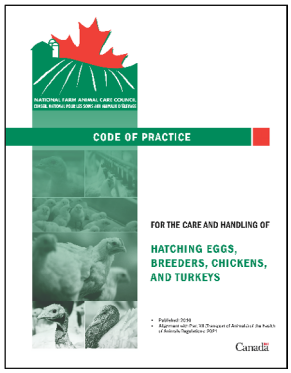
An entire section of this program is dedicated to handling, catching and loading guidelines in the animal care program and to guiding the producer to make good decisions around transport. It covers the farmers', catching crew, and transporter responsibilities.

As a transporter, you are directly concerned by the following elements:

- the size of openings such as container doors, cage doors, and panels on trucks should be large enough to permit easy passage of hens to avoid bone breakage and other injuries
- containers must not be dropped or tipped such that birds pile up against the side
- birds must be loaded into clean, well-maintained transport containers and vehicles
- the doors of the containers must be closed securely so that birds do not escape during loading or transit
- assessment and joint decisions should be made by the farmer, catching crew, transporter and processing plant when faced with cautious conditions
- the drivers of transport vehicles must be aware of climate conditions and make necessary adjustments to keep birds thermally comfortable
- catching and transport must be planned (respect feed withdrawal regulations)
- water access can only be withdrawn immediately before catching begins.

BREEDERS

National Farm Animal Care Council



Click the link to read the NFACC Breeders - Code of Practice

About this production code and how it impacts you.

Canada has a **National Code of Practice** for the Care and Handling of hatching eggs, breeders, chickens, and turkeys. It serves as our national understanding of animal care requirements and recommended practices for the sector. In addition, it promotes sound management and welfare practices for housing, care, transportation, and other animal husbandry practices.

An entire section of this code is dedicated to transportation and guides the producer to make a good decision around transport. It covers the evaluation of transport, preparing for loading and transport, catching, loading, and unloading procedures, catching and loading/unloading equipment and containers, and facilities design and maintenance.

Amongst the key requirements around transportation here are a few that will concern you directly:

- poultry transportation is a shared responsibility between all stakeholders
- the producer must inform the transporters about any changes in flock condition prior to loading
- stakeholders should adjust loading, departure, and transit times or routes to avoid potential delays
- the flock and environmental conditions, as well as the expected journey duration, must be taken into consideration when loading birds for transport
- poultry must be protected from being overcrowded, injured, overheated, and exposed to weather extremes and toxic things while in transport
- poultry must be monitored en route, and changes made to ensure a positive welfare outcome
- the transporters must have a contingency plan
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe, easy access to maintained driveways and yards.

Canadian Hatching Egg Producers (CHEP) Animal Care Program

About this animal care program and how it impacts you.

CHEP and its members are deeply committed to the humane and respectful treatment of all animals in their care. To support this goal, **CHEP** has launched the **CHEP Animal Care Program (ACP)**, an on-farm animal care assessment program for Canadian broiler-hatching egg producers. Their program ensures that broiler breeders have a safe and comfortable environment. It verifies that farmers meet the requirements and follow guidelines for space, water, feed, lighting, air circulation, handling, and more.

An entire section of this program is dedicated to transportation and guides the producer to make a good decision around transport. It covers the grower's role, transportation guidelines, pre-transport planning, fitness to transport, handling and catching, loading and unloading, facilities design and maintenance and haulers.

You will be directly concerned by the following elements:

- all parties involved in the catching and transporting process have a responsibility and obligation to ensure catching, transfer, and holding on-farm is undertaken in such a manner that minimizes stress and injury
- the transporters must be competent
- the transporters need to be provided paperwork and instructions prior to loading to minimize delays in departure
- the transporters have to be communicated changes in flock conditions prior to loading
- the average body weight and the actual number of birds to be shipped are provided to the transporter
- the design, construction, space, state of repair, and use of containers and equipment must allow the birds to be loaded, conveyed, and unloaded in ways that minimize stress and injury
- transport vehicles must be given unobstructed, safe and easy access to maintained driveways and yards
- the hauler must ensure that the birds are fit to travel and that the welfare of the birds is safeguarded from the time that they are placed into the transportation crates until they are unloaded at their destination
- all transport systems must permit adequate ventilation and protect pullets from adverse weather, be thoroughly cleaned before carrying birds to a new site, be well maintained and have no features on the crates or vehicles that could injure the pullets
- the hauler should have a contingency plan for handling, catching or euthanizing birds in case of emergency and drivers trained in its implementation.

PROCESSING

National Chicken Council Animal Welfare Guidelines and Audit Checklist

Click the link to read the **National Chicken Council Animal Welfare - Guidelines and Audit Checklist**

Slaughter Plant Guidelines and Audits

Canada does not have its own code for processing. We have a **National Code of Practice for transport**, and we will touch on that later. Regarding processing and its activities involved in animal welfare, we concentrate on transport and slaughter. Slaughter plants are also evaluated on transport because they are the last step of the process. Most of them coordinate and organize transport activities to their facilities.

So, for our guidelines, we rely on a North American approach which utilizes science-based standards as compiled by **North American Meat Institute (NAMI)**. The NCC is the national trade association representing vertically integrated broiler producer-processors.

About these guidelines and how they impact you.

Transporters shipping to processing plants that have fully embraced the NCC program will be evaluated based on these guidelines.

We will devote an entire section to that later.

Private Guidelines and Audits

Processing plants are selling their meat to clients who may have guidelines to which they have agreed to adhere to be allowed to supply them. Some fast-food chains are well known for their position on animal welfare down the food chain and have passed down their expectations to their suppliers (the processing plants you are transporting animals to).

How these private guidelines impact you.

To continue to be a preferred transport, you must be aware of these expectations and collaborate with the processing to ensure their compliance with their customers 'expectations'.

That's a lot isn't it?

By now, we hope that you realize how important YOU are as a contributor to the animal welfare effort in transport. Transport has its code of practice and precise regulations.

All the programs we just showed you measure guidelines previously agreed upon and keep score.

We can only improve what we measure." - Dr. Temple Grandin

These programs' goals and spirit are to foster continuous improvement rather than pointing fingers at anyone. If we rely on open and transparent communication and the will to do better, everyone will benefit, both animals and humans.

Regarding your transporter role, let's look at the auditing elements you are most likely to face during your transport activities. We will follow with tangible examples of the impact of these continuous improvements on animals and their carcasses.

AUDITING

Broiler chickens, layers, turkeys and hatcheries are all audited along with transportation and slaughter. Transport is audited at the hatchery, farm, and processing facility.

Government inspectors can also inspect it, but we will review that in full detail in the Regulations and Codes of Practice module.

Animal Welfare Auditing

Animal welfare auditing is not new to animal production. Broiler chickens, layers, turkeys and hatcheries are all audited along with transportation and slaughter. In addition, transport is audited at the hatchery, farm, and processing facility.

Assessment Tools

Almost all major retailers, restaurants and wholesalers have animal welfare committees. Production facilities and transport companies have started incorporating animal welfare assessment tools for transportation into their management programs. Animal welfare labelling programs generally include transportation in their program audits.

Types of Audits

Audits can be of two types, internal audits or external third-party audits.

Internal Audits

Individual driver performance is often assessed in internal animal welfare audits at the hatchery, farm, or slaughter plants.

The assessments contain criteria similar to the **National Chicken Council (NCC) audit** but often incorporate internal company policies and industry programs. In addition, labelling programs can also include their policy or expectations in the foundation audit.

Note: An internal audit usually bears no consequence to the certification status of the auditee. However, any non-conformance related to the transporter would still need to be corrected.

Third-Party Audit

Third-party animal welfare audits are intended to give a "snapshot" of the welfare of the animals being transported to the plant, not of individual drivers. They are usually meant to prove compliance with a given animal care program (NAMI, NCFA or private brand programs like McDonald's or A&W, for example).

Auditing Trucks

- Several trucks are audited, and the percentages are based on the number of animals transported on the audited trailers.

Compliance

- Compared to an internal audit, this audit has more implications for the compliance of the partner being audited (hatchery, farm, slaughter plant).

Non-Conformance

- Any non-conformance related to the transporter will need to be corrected and proven for your partner (hatchery, farm, slaughter plant) to obtain its full compliance with the program.

KEY COMPONENTS OF A TRANSPORT AUDIT

We will now review the key components of a transport audit.

Corporate Commitment

- The company must have a written animal welfare program that provides a clear understanding of how the program will be implemented.
- Current senior management must endorse and fully support the animal welfare program.

- The company must have, implement, and document an internal (i.e., first party) and an external (i.e., third party) auditing program.
- The company must have a mechanism in place whereby animal welfare violations can be reported without the threat of retaliation.

Personnel Training

- All employees who work with live birds must be trained annually on chicken behaviour and welfare fundamentals.
- All employees who handle live birds must also be trained annually using an SOP-based or task-specific training program that focuses on acceptable procedures at the locations where they work (hatchery, grow-out, catching and transportation, and slaughter).
- Training must be documented for each employee and include how the training was conducted (classroom, online, etc.) and the tasks and responsibilities for which the employees were trained.

Hatchery Operations

- A written chick delivery vehicle SOP for daily operations and emergencies must be available for review by the auditor.
- Transport vehicles for chicks must be equipped with temperature-control capabilities and alarms should these systems fail during transport when the driver is physically separated from the chick environment.

Catching and Transportation

- Any abuse of birds during catching or transportation is a major non-conformance.
- The live-haul department must have a person responsible for ensuring that proper animal welfare practices are followed at all times and that there is strict adherence to the guidelines.
- The live-haul department must have a written training program for bird catching, handling, and transportation.
- The live-haul department must have a written plan for emergency response and recovery.
- Transport modules/containers are appropriately sized and in good repair.
- Loss of birds from trailers during transport to the processing operation is a major non-conformance.
- Transport containers should be loaded at proper densities.

Wilful Acts of Abuse

The abuse of animals is not tolerated under any circumstances. Conditions that put chicks or broilers in immediate danger are acts of intentional and egregious animal abuse. These include but are not limited to the following:

- poking a stick, prod, or another object into a sensitive part of the bird such as the eye, nostril, mouth, ear, or cloaca
- malicious use of equipment that results in breaking a bone, suffocation, or death of a bird(s)
- dragging, hitting, kicking, or throwing a bird to cause injury
- striking a bird(s) with any object to cause injury.

Audit Failure

Any intentional and egregious abuse observed by the auditor during any audit stage is considered a major non-conformance. Therefore, any major non-conformance must be documented, and appropriate corrective action must be taken.

If the auditor witnesses a major non-conformance, it results in an automatic audit failure of that section of the audit. In addition, it must result in the retraining of all employees involved in that section of the process.

TRANSPORTATION STRESS

Birds are subject to several stressors during transport, including fasting and water withdrawal, handling, acceleration and motion, social disruption, noise, thermal changes, prolonged exposure to extreme temperatures, crowding, and lack of rest.

All the audit measurements we presented to you are meant to minimize unavoidable stress and eliminate avoidable stress for the animals during transport.

A Closer Look

We will first have a closer look at the various forms of stress an animal can endure and will complete this module by showing you how these stressors can directly impact meat quality.

The Role a Transporter Plays

As a transporter, not only do you transport the animals from one point to another, but you also have a role to play in the quality of the finished product and the experience the consumer will have from the meat derived from the animals you hauled.

Transportation Stress

Physical Stress

- This can occur during relocation, primarily if the animals are handled roughly.
- Catching, lifting, passing of birds between handlers, caging, restricted movement, crowding, lack of rest, accelerating and motion, noise and road vibrations, noise, thermal changes, and prolonged exposure to extreme temperatures also bring on physical stress during transport.

Psychological Stress

- Psychological stress, mainly fear, has a substantial impact on all animals.
- Human contact is a primary source of fear for birds.
- Confinement can also elevate stress levels as livestock are claustrophobic by nature.

Social Stress can result from the following:

- overcrowding
- mixing of unfamiliar animals (although this is not common practice in poultry), or
- isolating individual animals.

Environmental Stress

Environmental Stress occurs when the animals are not comfortable during the move. Environmental stressors include:

- thermal changes
- prolonged exposure to extreme temperatures
- poor ventilation and
- inhalants.

Nutritional Stress

Nutritional stress refers to the following:

- the absence of necessary nutrition and water required for the animals to be transported in comfort and good health, and
- to allow them to recover from the stress of the entire relocation process.

For birds, it is mainly experienced through:

- fasting and
- water withdrawal.

MEAT QUALITY

Improper Handling and Transport

Stress can influence behaviour and meat quality.

Improper handling and transport have a negative economic impact on the poultry industry. Carcass devaluation occurs when any bruise or condition adversely affects the quantity or quality of the carcass of a slaughtered animal.

Handlers and transporters can improve bird welfare and minimize stress by handling and transporting birds gently.

Handle all birds with care!

Poultry Quality

- Bruises and dead on arrivals cost millions of dollars per year.
- Quality defects cost the industry up to several hundred million dollars annually.

KEY LEARNINGS

Animal Welfare in Transport is Important for the Animal
Animal welfare in transportation is important for everyone involved, farm to fork. You are part of the solution!

Your Accountability
Like the other stakeholders, you will be held accountable (audited) for doing the right things and improving your practices.

Level of Care
It is our obligation to provide the appropriate level of care to ensure the animals' environment is one where they experience minimal stress.

Proper Handling
Careful handling of animals during loading, unloading and during transport minimizes losses and contributes to the health and well-being of animals in transit.

A Number of Stressors
Birds are subject to several stressors during transport, including feed and water withdrawal, handling, acceleration and motion, social disruption, noise, thermal changes, prolonged exposure to extreme temperatures, crowding and lack of rest.

2 REGULATIONS AND CODES OF PRACTICE IN POULTRY TRANSPORT

In this module, we will review the regulations and the Code of Practice for transport.

As you have learned and have been presented numerous times, transport is a shared responsibility. This is more than a moral conviction; it is rooted in Canadian regulations.

As a Poultry transporter, it is **YOUR** responsibility to be aware of the regulations pertaining to the humane transportation of livestock. It is the responsibility of the individual performing the task and your employer's responsibility to be aware and ensure you are knowledgeable of these regulations.

CLT provides an overview of federal and US requirements for livestock transport.

CANADIAN FEDERAL REGULATIONS GOVERNING HUMANE ANIMAL TRANSPORT

The intent of the Canadian humane transport regulations is to prevent the avoidable suffering of animals throughout the transport process.

All those involved in the transport of animals must be knowledgeable, accountable, and take proactive steps to ensure animal welfare.

The following Acts (3), and their respective regulations, work together to govern the humane transport of animals into, within and out of Canada.

1. **Health of Animals Act (HAA)** Paragraph 64(1)(i): provides the authority to make regulations for the humane treatment of animals, including transportation within, into or out of Canada.
   Click the link to read the Health of Animals Act (HAA) Paragraph 64(1)(i)
   Click the link to read the Health of Animals Regulations (HAR) – Part XII (Transport of Animals)

2. **Safe Food for Canadians Regulations (SFCR):** govern the humane treatment of food animals within a licenced holder's establishments.
   - CFIA enforces SFCR in federally licenced slaughter establishments
   - the province regulates the welfare of animals at provincial slaughter plants.

   Click the link to read the Safe Food for Canadians Act (SFCA)
   Click on the link to read the Safe Food for Canadians Regulations (SFCR)
   Click the link to read the Provincial slaughter plant regulations

3. **Provincial legislation:** Each province regulates the humane treatment of animals on farms, in auction markets, farmers' markets, assembly yards and provincial slaughter establishments. Each province has its own enforcement system.
   - some provinces have additional legislation related to humane animal transport. Regulated parties are encouraged to access the Provincial regulations in which they operate.

Click the link to read the Provincial Legislation

Provincial inspectors or police officers/RCMP also investigate complaints under the **Criminal Code** which prohibits wilful and unnecessary pain, injury, and neglect of animals (provisions 445(1)(2)).

Click the link to read the Criminal Code

CANADIAN FOOD INSPECTION AGENCY (CFIA)

The **Canadian Food Inspection Agency (CFIA)**, with the help of other federal, provincial and territorial authorities, enforces the requirements for the transport of animals into, within, and leaving Canada.

The federal humane transport regulations apply:

- when the animal is handled with the intent to transport or has had feed, water and rest (FWR) removed (prior to loading)
- continue throughout time in transit, including refueling periods, driver rest stops, and could include activities at auction markets
- continue to apply until the animal is unloaded at their destination and has received feed, water and rest, or is humanely slaughtered.

A regulated party must comply with all legal requirements. Remember that sometimes more than one act and its regulations may apply to a situation.

For example, if an animal is unloaded at a federally licensed slaughter plant, there is an overlap of two regulations under the CFIA's oversight which must be met; humane transport (Health of Animals Regulations - Part XII), and humane handling and slaughter under the Safe Food for Canadians Regulations.

HEALTH OF ANIMALS REGULATIONS, PART XII - TRANSPORT OF ANIMALS

This section will rely on the CFIA guidance document rather than outlining every law article. As a result, the wording will be much easier to read and understand.

It is recommended to refer to the current published online regulations for precise wording.

General

Transported animals must be:

- fit for the intended transport process before transport begins
- monitored on an ongoing basis at a frequency which assures the animal remains fit throughout the journey and that they receive prompt care if needed.

Regulated Parties

All persons involved in the transport of animals share responsibility under the law, including those who:

- plan the transport
- prepare animals for the journey (including feed and water withdrawal)
- assemble animals
- catch animals
- load animals
- confine animals in a crate or conveyance
- move animals from the point of origin to their destination
- unload animals from the conveyance or container at their final destination.

Humane Transport is a Shared Responsibility and applies to all those involved directly or indirectly in the transport of live animals:

- animal owners
- producers
- buyers
- commercial carriers
- exporters
- importers
- carriers
- animal handlers
- processors
- feed, water and rest (FWR) stations/locations
- assembly centres (auction markets, assembly yards, independent holding facilities associated with slaughter establishments, livestock dealer's facilities).

Persons involved in the transport of animals will need to know the following:

- know and comply with the humane transport regulations
- be trained and competent to work with the species they are transporting.

Comply with Regulations

Persons involved in the transport of animals need to:

- collaborate with inspectors
- keep records for 2 years
- produce a copy of the records when requested by a CFIA inspector
- give the inspector all reasonable assistance
- not hinder nor obstruct the work of the CFIA inspector or provide false or misleading statements to the inspector.

Regulated Activities

Regulated activities (transport methods that are regulated)

All modes of transporting animals are regulated.

The transport process covered applies to all aspects of the animal transport continuum and related confinement including:

- feed and safe water withdrawal and providing rest in preparation for transport
- selection of fit animals for transport/confinement
- animal handling (loading)
- loading of animal(s) into conveyances, including into crates, or containers
- transport and related confinement of animal(s)
- post transport access to feed, safe water and rest when it is required (or the animal is slaughtered)
- unloading the animals
- animals (in containers) remain in transport until they are removed from the container or enter a stunning chamber for the purposes of slaughter.

In the context of commercial transport, we understand that most livestock will not be transported in a "**container**".

Containers are mostly used with poultry and small non-poultry animals such as rabbits, minks, etc.

Containers should be designed, constructed, equipped, maintained and used to prevent the animal's suffering, injury or death.

Containers must:

- be suitable for the specie
- prevent escaping
- provide adequate ventilation and flooring
- not be likely to collapse or topple over
- have no exposed bolt heads, angles or other projections
- not contain objects that are unsecured
- have secure fittings
- be cleanable except for one-time use
- allow the animals to be visible from outside the container or at least two of the container's outer sides have a readily visible sign or symbol indicating the presence within of a live animal and a readily visible sign or symbol indicating the upright position of the container.

A regulated party must comply with all legal requirements.

Application

All persons involved in all parts of the transport process for animals entering or leaving or within Canada are required to be aware of and transport animals in compliance with this legislation's requirements.

KNOWLEDGE AND SKILLS

People involved in animal transport (that is, planning, loading, confinement, transportation and unloading) must:

- know about handling and transporting animals
- have skills, and execute their tasks with competence.

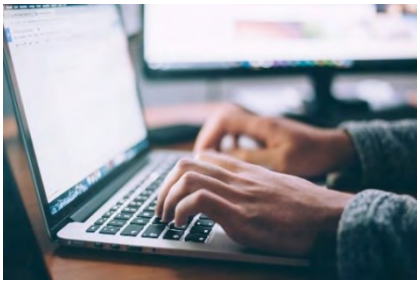
Information can come from mentorship and/or formal training.

You must be able to demonstrate that you have the required knowledge and skills.

Knowledge and Skills Required

Animals have different needs. The knowledge and actions you take must be appropriate for the species/type of animal.

Knowledge and Skills



- behaviour of species being transported
- indicators of stress due to pain/ heat/cold/fear
- species-specific signs of pain, illness or compromise
- flock instincts
- their probable response to stimuli
- common challenges for these animals in transport
- principles of handling
- space requirements
- signs/conditions to evaluate fitness for transport
- factors associated with an increased risk of having a negative outcome during transport
  - long-distance
  - adverse weather
  - animal associated factors (for example, very young, very old, lack of body covering).

Training (commercial carriers)

Every commercial carrier provides training to all employees and assures all employees involved in animal transport know their specific roles.

Topics that must be covered in this training:

- animal behaviour
- assessment of fitness for transport
- animal handling/space requirements/loading methods/confinement/transport/unloading
- contingency plan
- effective monitoring during the entire transport process
- risk factors for animals in transit.

CONTINGENCY PLANS

Are mandatory for commercial carriers and anyone transporting animals for business or financial benefit. Assessment of risk factors related to transport and monitoring requirements.

During the process all those involved in animal transport must assess:

- animal's capacity to withstand the transport process
- potential factors causing animal injury/suffering/death
- risks prior to animal loading/confining/transporting/unloading.

Every person involved in animal transport must monitor:

- Animal's capacity to withstand confinement and transport (manner and frequency are important and vary with each scenario).

Risk factors related to transport include the following:

- current condition of the animal
- a pre-existing condition
- the space requirements
- animal handling/restraint
- the expected time without feed, safe water and rest
- the expected duration of the transport/confinement
- foreseeable delays

- foreseeable weather conditions
- foreseeable conditions encountered during transport
- type/condition of the conveyance/ container/equipment.

TRANSPORT OF UNFIT ANIMALS

Animals defined as unfit are likely to suffer during transport. Therefore, they cannot be loaded or transported with **two exceptions**:

1. On the advice of a veterinarian for care or treatment, and then only if special provisions are taken to prevent additional unnecessary suffering, or
2. During the seizure of animals following enforcement action and only if special provisions are taken to prevent additional unnecessary suffering.

Unfit Animals in Containers

Unfit animals in containers can be manually removed from the container before being rendered unconscious or humanely killed (in a manner that is not likely to cause the animal to suffer, sustain an injury, or die unnecessarily).

Animals will be considered unfit if they are showing the following conditions.

Unfit Conditions:

- non-ambulatory
- any fracture that impedes mobility
- is lame in one or more limbs to the extent that it exhibits signs of pain or suffering and halted movements or a reluctance to walk
- in shock or is dying
- severe prolapse
- signs of a generalized nervous system disorder
- laboured breathing
- severe open wounds
- signs of dehydration
- signs of hyperthermia or hypothermia
- signs of fever
- signs of exhaustion
- is extremely thin
- any other signs of infirmity, illness, injury or condition that indicates an animal cannot be transported without suffering.

TRANSPORT OF COMPROMISED ANIMALS

Compromised animals, prior to loading, can only be transported directly to the nearest suitable place to receive care or be humanely killed.

Document your decisions and actions taken to prevent unnecessary or additional suffering.

Animals identified as Compromised prior to loading are loaded/transported with care to minimize suffering:

- have additional measures taken (for example, additional environmental protection)

- transported directly to the nearest suitable place to receive care/treatment or to be humanely killed
- provided feed, water and rest at a minimum every 12 hours.

If the animal becomes compromised during transport:

- special provisions are required to protect them from further transport-related harm
  - the animal(s) can be taken for care or humanely killed at the nearest suitable place.

Compromised

Animals are considered compromised if showing the following conditions:

- acute frostbite
- lame other than as described in unfit
- has a deformity or fully healed amputation
- minor prolapse
- wet bird
- has any other signs of infirmity, illness, injury or condition that indicates an animal has a reduced capacity to withstand transport.

If in doubt about fitness, assume the animal is compromised and transport it with special provisions.

NOTE: THE MAXIMUM TIME A COMPROMISED ANIMAL CAN BE WITHOUT FEED, SAFE WATER AND REST IS 12 HOURS.

An animal that is likely to become compromised or where deterioration is not unexpected during confinement and transport

An animal may appear fit for transport prior to loading. However, some indications on a farm may indicate a risk of deterioration during transport.

It is not acceptable to withhold this important information from the transporter.

An animal that becomes compromised during transport

The transporter may be required to make adjustments to accommodate the compromised animal.

Additional information regarding compromised and unfit animals

Compromised poultry and rabbits in crates

All outcomes listed above apply to compromised crated poultry and rabbits with the following modifications:

- compromised crated poultry and rabbits may be transported without isolation from fit animals in the crate (however, density within the crate may need to be adjusted up or down and must not be likely to lead to unnecessary suffering, injury, or death).

An animal that becomes compromised or unfit during transport must be transported directly to the **nearest suitable place** that is suitable to minimize suffering, and reasonable measures must be taken to prevent the animal's unnecessary suffering, injury or death.

Nearest Place

In the context of the regulations, "the nearest place" is the closest suitable facility where an animal can be transported to receive care or be humanely killed.

Depending on each specific situation, this place could be a veterinary establishment, a farm, an abattoir, an assembly centre (only for animals that become compromised or unfit during transport) or any other appropriate location, provided the animal can receive the care or treatment needed, or to be humanely killed.

The nearest suitable place may only sometimes be the closest on the map.

ANIMAL HANDLING FROM LOADING TO UNLOADING

Animals are handled during loading, confinement, transport and unloading in a manner that does not cause suffering, injury or death.

People who transport animals must not:

- handle animals in any way that is likely to cause injury, suffering or death (such as kicking the animals, or lifting them by their tail, one wing, head or feathers).

When an animal is in a container, people involved in the process must not:

- drop, kick or throw the container
- handle the container in any other manner that is likely to cause the animal's suffering/injury/death.

Handling of Containers and Conveyance:

- people involved in the transport process must handle each container and the conveyance in a manner that
  - does not cause or is likely to cause injury/suffering/death to any animal contained within.

Every animal is handled during loading, confinement, transport and unloading in a manner that does not cause or is not likely to cause suffering, injury or death.

Animals will be loaded and unloaded using equipment that is designed, built, constructed and maintained to prevent likely suffering, injury or death.

WEATHER PROTECTION AND VENTILATION

Animals are protected from the risk of suffering, sustaining an injury and/or death due to inadequate ventilation or exposure to meteorological or environmental conditions during transport.

Ventilation

The required outcome is achieved when regulated parties have taken action to ensure:

- there is enough ventilation to prevent suffering, injury or death
- the ventilation system is designed to remove heat and cold
  - ventilation is adjusted to suit ambient temperature and humidity so that animals are not overheated (hyperthermia), subject to hypothermia or injured
  - moisture generated by the animals
  - airborne pollutants (excessive dust that impedes breathing, gases)
- at destination (e.g. farm [day-old birds], or slaughter facilities [market birds]), operational conditions must prevent animal suffering until they are unloaded through use of ventilation, shade, shelters and covers to maintain the proper ventilation and humidity for the animals.

Weather Conditions

Protect animals from dangerous extremes such as dehydration, hypoglycemia, frostbite, and hypothermia.

High temperatures, high humidity, and poor ventilation can cause severe heat stress in transported animals.

Animals transported in crates, and swine, are especially vulnerable.

When to reschedule a transport due to unacceptable weather

In extreme weather, the regulated party may need to reschedule the transport. Therefore, regulated parties are urged to consider the external temperatures, conditions, available protections, and load characteristics.

Air Flow

The regulated party is responsible for knowing and understanding the inherent risks during all weather conditions as well as species-specific thermo-neutral zones (temperatures within which they are able to regulate their body temperatures), animal behaviour, and signs of the suffering of the transported animals to act appropriately when deviations from normal are identified.

Stationary Conveyances/Trailers

Observe and evaluate animals for indicators related to ventilation:

- panting
- animals piling on top of each other
- restlessness or agitation
- distress
- injury
- shivering.

Exposure to toxic or noxious things

Animals should be protected from exposure to anything toxic/noxious, including exhaust from the conveyance.

Space requirements

Animals are not subjected to avoidable suffering or death due to overcrowding.

Overcrowding

No animal is transported in a way that it is overcrowded.

Overcrowding occurs when, due to the number of animals:

- the animal cannot maintain its preferred position or adjust its body position in order to protect itself from injuries or avoid being crushed or trampled
- the animal is likely to develop a pathological condition such as hyperthermia, hypothermia or frostbite
- the animal is likely to suffer, sustain an injury or die.

Category	Space Requirements
Poultry in a container (not ratites)	able to maintain a **squatting or sitting position** with sufficient space to permit a full range of **head** movement without coming into contact with the cover of the container
All other animals (and poultry not confined in a container)	able to maintain **its preferred position** with sufficient space to permit a full range of **head movement**

Space

Regulated parties must ensure animals are not overcrowded through appropriate planning and effective communication about loading densities.

Isolation

Incompatible animals are isolated from one another to prevent suffering, injury or death.

Examples include, but are not limited to:

- groups or individual animals of significantly different size and weight.

CONVEYANCES AND CONTAINERS

Conveyances and containers are designed, constructed, equipped, maintained and used to prevent animal suffering, injury or death.

When animals are within, they must:

- be suitable for the species
- prevent escape
- provide adequate ventilation for each animal
- be free of exposed bolt heads, angles or other projections
- have secure fittings
- do not contain unsecured objects
- be cleanable (except for one-time use)
- not be likely to collapse or topple over.

Conveyance

If using a container on a conveyance, the container must be secured to the conveyance in a manner that prevents it from moving during transport.

Visibility

In addition, animals must be visible from the outside of the container or there must be readily visible signs indicating:

- the presence of a live animal inside
- the upright position of the container.

FEED, SAFE WATER AND REST

The date, time and place where the animal was last fed, watered and rested will be recorded at the time of loading by both commercial carriers and people transporting animals either during the course of business or for financial gain.

Animals will be provided with feed:

- of an appropriate type for their species, age and condition
- in amounts sufficient to prevent a nutritional deficit.

Safe Water

Animals will be provided with safe water in amounts that are sufficient to prevent them from becoming dehydrated.

Maximum allowed intervals without feed, water, and rest

Animals will be provided with rest that is appropriate for their species, age and condition in order to prevent the animals from suffering from exhaustion, and at intervals that do not exceed the following:

Species and Class	Maximum time interval (in hours) without feed, water, rest
Compromised animal of any species, size, age, sex, or breed	12
Broiler chickens, spent laying hens and rabbits	24 for safe water 28 for feed
All other animals	36
Day-old poultry (from the time of hatching)	72 (single period, not repeated)

Rest Stop Requirements

Rest periods, must not be less than 8 consecutive hours (time to next required rest starts after the animal has been rested 8 hours).

Safe Water for Animals

Water must be safe for the animals and provide hydration:

- Water delivery systems should be inspected daily and cleaned regularly.

Spraying crates, modules or trailers does not constitute access to potable water.

TRANSFER OF CARE

To ensure continuity of care, no animal is to be left at any slaughter facility or assembly centre without written notice that care has been transferred between the transporter and the receiver.

This is done to ensure that the individual responsible for caring for the animals can be clearly identified at all times.

These documents should be kept for 2 years.

The written document includes the following:

- the conditions of the animal(s) on arrival
- the date, time, and place where the animal(s) were last fed/watered/rested
- the date, time and place of arrival
- an acknowledgement from the consignee that the animal(s) has been received and is/are now in their care (and any inconsistencies they note from the driver's documents).

If a transporter leaves animals without acknowledgement from the receiver, they could be held responsible for their care.

The transporter could choose not to leave the animals. The transporter must document their decision taken and why it was in the best interest of the welfare of the animals. While they cannot make other regulated parties do the right thing, they can document what they did.

RECORD KEEPING FOR TRANSPORT

Commercial carriers, and those who transport animals in the course of business or for financial benefit, must keep records related to the movement of those animals. Records must be made prior to departure and during transport.

Information to be contained in the records:

- the name and address of the producer or shipper, the receiver, the transport company (if applicable), and the driver's name
- conveyance information
  - licence/registration number
  - usable floor space in the conveyance or crate
- the date, time and place that the crates or conveyance were last cleaned and disinfected
- the date, time and place where the animals were loaded
- the number, description and weight (actual, if available, or estimate) of the animals
- the date and time when the animals last had FWR.

Any changes to the information above must be noted as soon as possible.

End of Transport

The following information must be added to the record when transport ends:

- the date and time when and the place where the animals are fed, watered and rested
- the date, time and place of arrival of the animals at the destination.

Duration

These written records must be kept for a period of 2 years.

Duplication of Record-Keeping Requirements

The regulated party does not have to repeat information in separate documents. A single document that meets all needs is acceptable.

Although CFIA does not prescribe the format, it should be noted that the records, or a copy, must be available if requested by CFIA.

SAFE FOOD FOR CANADIANS ACT

The **Safe Food for Canadians Act (SFCA)** and the **Safe Food for Canadians Regulations (SFCR)** govern the humane treatment of food animals within a licenced holder's slaughter establishments.

CFIA enforces **SFCR** in federally licenced slaughter establishments. The welfare of animals at provincial slaughter plants is regulated by the province, not **CFIA**.

We will only report elements related to the humane transport of animals that are concerned by the **SFCR.** Some of them will overlap with the **Health of Animal Regulations**.

Requirements

Avoidable Suffering, Injury or Death

A licence holder must handle a food animal at the establishment in a manner that does not cause avoidable suffering, injury or death and must not subject it to any condition that may cause such suffering, injury or death.

Assessing

A licence holder must assess whether a food animal is showing signs of suffering or injury on its arrival at the establishment.

Before arriving at the plant or immediately upon arrival transporter must communicate any animal welfare issues to the receiving staff to help them assess the situation and take immediate and appropriate actions.

Monitoring

After a food animal's arrival, the licence holder must monitor it on a regular basis, including assessing the conditions to which the food animal is subjected in the establishment that may cause avoidable suffering, injury or death.

This holds true to transporter waiting to be unloaded on slaughter plant site.

Corrective Action

If the licence holder determines that conditions exist that may cause avoidable suffering, injury or death to a food animal, the licence holder must immediately take corrective action.

The same applies to the transporter while on the slaughter plant site until the transfer of care has been completed.

Suffering – Immediate Measures

If a food animal is showing signs of suffering, the licence holder must immediately:

a) alleviate its suffering
b) humanely kill it or
c) slaughter it in accordance with these Regulations.

Ventilation

A licence holder must provide a food animal with sufficient ventilation to prevent the suffering of, injury to or death of the animal.

Handling

A licence holder who handles a food animal, including by handling a crate containing a food animal, during any activity they conduct in the establishment, must:

a) be able to do so, by reason of the person's competencies and qualifications for the activity, without causing avoidable suffering, injury or death to the food animal, and
b) do so in a manner and under circumstances in which the equipment that is used will not cause avoidable suffering, injury or death to the food animal.

Areas of Establishment and Equipment

A licence holder must, during any activity conducted by the licence holder, use only areas of an establishment and equipment for the handling of a food animal that is designed, constructed and maintained in such a manner that they will not cause avoidable suffering, injury or death to the food animal.

As a transporter, if you notice anything with the establishment or equipment that could cause injury, suffering, or death, you should report it to the plant.

Water and Feed

In the case of a food animal confined in a crate, the licence holder must provide the food animal with water or another hydration source and feed within 24 hours after it arrives at the establishment. When the time overlaps with the FWR provision of Part XII of the HAR, the license holder must comply with the regulation that is more strict.

CRIMINAL CODE

Provincial inspectors or police officers/RCMP also investigate complaints under the Criminal Code which prohibits wilful and unnecessary pain, injury, and neglect of animals.

Animals

Everyone commits an offence who wilfully causes or, being the owner, wilfully permits to be caused unnecessary pain, suffering or injury to an animal or a bird.

Anyone who commits this offence is guilty of:

- an indictable offence and liable to imprisonment for a term of not more than five years; or
- a crime punishable on summary conviction and liable to a fine of not more than $10,000 or imprisonment for a term of not more than two years, less a day, or both.

Wilful acts of abuse on animals are punishable and may lead to criminal charges.

What to Expect During an Inspection

While CFIA has the authority to conduct an animal transport inspection at any location where animals may be transported, CFIA's approach to inspections is risk-based.

CFIA Inspectors also do routine inspections to verify compliance with the requirements of legislation at:

- points of entry into Canada (borders, ports and airports)
- federally and provincially registered slaughter establishments
- assembly centres (auction market, sale yards, or other areas where animals are gathered)
- randomized roadside inspections
- unannounced inspection (such as responding to a complaint or concern of a citizen or employee or a referral from a federal, provincial/territorial or municipal government department or agency)
- roadside in emergency situations, such as truck rollovers and accidents.

When CFIA inspectors are on your property, at your place of business or have stopped your vehicle, they will:

1. identify themselves
2. treat you in a respectful and unbiased manner
3. ask to speak with the person in charge or the pre-identified contact
4. explain the purpose of the inspection and any areas that may be of specific concern.

While on-site, the inspector will collect information to verify compliance with the legal requirements and make notes to record inspection details.

The inspector may, for example:

- ask to speak with the people involved, such as drivers, receivers and shippers
- collect samples
- take photographs
- take videos
- copy documents
- conduct post-mortem examinations
- review records (monitoring records, health records to support the decision to load an animal, itineraries and schedules)
- in the case of inspection of a commercial carrier, these documents include
  - animal transport records
  - contingency plans
  - documentation of the transfer of care and control
  - evidence of employee training.

You are legally required to provide information to and assist an inspector.

Please ensure the inspector is aware of any safety concerns or procedures and any biosecurity controls while on your property so that they are safe and can adhere to the biosecurity procedures you have in place.

The duration of transport inspection is variable. The inspection can be brief when the animals are visible, records are in order and the load can be readily determined to be in full compliance.

In other cases, a more detailed inspection may be required.

WHAT IF YOU ARE FOUND TO BE NON-COMPLIANT?

CFIA has the flexibility and authority to select the appropriate enforcement actions based on risk and the nature of the non-compliance.

Gravity of Non-Compliance

The gravity of non-compliance is determined by considering the potential or actual harm associated with the non-compliance, the compliance history of the regulated party, and the intent related to the non-compliance.

Administrative Monetary Penalty

These factors also help determine whether an **Administrative Monetary Penalty** is issued as a notice of violation with a warning or financial penalties.

Can an individual receive an administrative monetary penalty?

Administrative Monetary Penalties can be issued to an individual or a company.

What are the penalties?

Penalties

Administrative Monetary Penalties can be issued as a notice of violation with a warning or financial penalties.

Penalty Range

Administrative Monetary Penalties with financial penalties to individuals can range from $500 to $1,300.

Violations

Violations committed in the course of business or to obtain a financial benefit can result in financial penalties ranging from $1,300 for minor violations to $15,000 for very serious ones.

How to React

How to react if you Receive a Notice from CFIA that you are Under Investigation for Non-Conformance to Humane Transport Regulations

Take Your Time

- **Don't panic; stay calm.**
- Read the entire document upon reception.
- Consult a trusted counsellor to validate your understanding of the situation.
- Reach out to the contact person identified in the document to clarify the situation if necessary.
- Ask to receive the evidence collected (photos, videos, documents, testimonials, etc).

Think About It

- The best way to avoid unpleasant surprises is to **master the requirements and comply with them at all times**, was this the case?
- Maybe you can learn from this situation and approach things in a new and different way next time to minimize risk and ensure compliance.
- Ultimately, the choice is yours: do you want to make the most of your current situation, stay frustrated, or consider other opportunities?
- The **laws are there for everyone and will not change**.

Consider

- If you want to improve your current situation, **reflect on your actions** and those of your partners.
- What could you do better? What procedures or problems can you clarify to avoid recurrence?
- The **source of the problem** may be well in advance of transport itself.

Act

- Even if the situation can be **resolved in the short term** (simple warning, notice of non-compliance without administrative monetary penalties), it is probably a good idea to **start changing your methods and habits**.
- Organize brief meetings with stakeholders to update your knowledge, expectations and procedures.
- **Communicate your achievements and new procedures internally** so that changes are put in place permanently.
- Finally, respond as soon as possible to the **CFIA's requests** and **communicate your next steps** with them to demonstrate your interest in correcting the situation.

Conclusion

- Animal welfare in animal transport is a shared responsibility.
- **The law applies to all parties involved**.
- Do not accept putting yourself at risk, your partners and even less for the animals under your care; you owe them that: They are why you have a job in animal transport today.

LIVESTOCK TRANSPORT IN THE UNITED STATES

This section is optional as not all transporters transport animals to the United States.

When you cross the border into the United States, most humane transport laws are similar to ours in Canada.

When it comes to transport duration and rest, here is a little difference you must be aware of:

The Twenty-Eight Hour Law

The Twenty-Eight Hour Law was initially passed on March 3, 1873. The Law was then repealed and re-enacted in 1906 and again in 1994 to set humane standards for the transportation of livestock. If livestock is transported for longer than 28 consecutive hours, they must be offloaded for at least 5 straight hours to get feed, water, and rest. The U.S. Department of Agriculture enforces the Law.

Nonapplication -This Law does not apply when animals are transported in a vehicle in which the animals have food, water, space, and an opportunity for rest.

Civil Penalty - A rail carrier, express carrier, or common carrier (except by air or water), a receiver, trustee, or lessee of one of those carriers, or an owner or master of a vessel that knowingly and wilfully violates this section is liable to the United States Government for a civil penalty of at least $100 but not more than $500 for each violation. On learning of a violation, the Attorney General shall bring a civil action to collect the penalty in the United States district court for the judicial district where the violation occurred or the defendant resides or does business.

Humane Slaughter of Livestock Act, 9 CFR 313.50

Transporter actions contributing to inhumane slaughter or handling can cause the **USDA** inspector to shut down a plant or a section of a plant.

Livestock pens, driveways and ramps must be in good repair, not cause pain or injury to animals, provide sound footing and facilitate ease of animal handling.

When Crossing the Border

- Trailers must be loaded to conform with the route's state weight restrictions and bridging allowances.
- All drivers must have a current passport to travel into the U.S. and are subject to drug testing.
- Required paperwork must be presented to U.S. Customs.
- Once drivers clear **U.S. Customs**, they are to report directly to the **USDA Veterinary Inspection Station**, where the load and corresponding paperwork will be checked. The trailer doors will be sealed at this point. **NEVER** break the seals on a trailer. Only authorized personnel are allowed to break the seals at offloading.

For the Most Efficient Entry into the U.S.

- Be aware of the hours of operation of the chosen border crossing, especially the **USDA Veterinary Inspection Station** on the other side.
- Have your paperwork and ID ready to go.
- Have your axle weights configured before the trailer is sealed because entry is prohibited after the seals are applied.

CODE OF PRACTICE FOR THE CARE AND HANDLING OF FARM ANIMALS: TRANSPORTATION

The **Code of Practice for the Care and Handling of Farm Animal – Transportation (2001)** is currently under review.

It is still referenced at times for enforcement.

Currently, the interpretive guidance for regulated parties of the **Health of Animals Regulations: Part XII: Transport of Animals-Regulatory Amendment** offers great reference in addition to this outdated guide.

Health of Animals Regulations: Part XII: Transport of Animals-Regulatory Amendment Interpretive Guidance for Regulated Parties.

BEHAVIOR & HANDLING OF LIVESTOCK

BEHAVIOR & HANDLING

This section introduces general behaviour and handling as it applies to the commercial transport of domesticated poultry.

It is important to be confident in your ability to work with birds during all aspects of transport. Therefore, further training and experience may be required.

Contact your employer or your provincial commodity organizations for other training opportunities.

The key to effective poultry handling is understanding their natural behaviour.

Once you understand their behaviour, you will be able to handle them more **effectively** and **efficiently**.

Effectively: catch, crate or load them in an orderly fashion, quickly, carefully and effectively .

Efficiently: Proceed with the least stress for you and the animals.

Improving your poultry handling skills will:

- improve bird welfare
- decrease the chances of bruising or injuring the birds
- decrease the chances of personal injury
- make your job easier.

PRINCIPLES OF POULTRY BEHAVIOUR & PHYSIOLOGY RELATED TO CATCHING AND TRANSPORT

Before moving ahead with handling poultry, we will review essential aspects of their behaviour and physiology of poultry as it relates to catching and transport.

Compared to livestock, poultry are manually handled into transport crates or modules during the confinement process.

A better understanding of poultry physiology will allow handlers to make better connections between the need and the welfare of the birds and the impacts of their restraint and handling techniques.

The repetitive and routine aspect of catching and transport operations has the potential to desensitize our vigilance towards animal welfare.

With a better basic knowledge of their behaviour and physiology, handlers' awareness will contribute to eliminate or minimize birds' suffering, pain, fear, and distress that could be involuntarily caused.

This knowledge will also help you make better decisions related to the entire transport process:

- fitness to transport recognition
- catching techniques
- confinement techniques
- transport conditions and monitoring
- unloading techniques.

BEHAVIOURAL CHARACTERISTICS OF BIRDS

Strong Flock Instinct

Prey animals possess a strong herd/flock instinct and isolation from their herd or flock mates stresses them.

Driven by Food and Fear

The two main motivators for birds are food and fear – they know they need these two things to survive. They need to eat, and they need to be fearful of predators.

Because humans are predators, birds fear people.

A bird's natural response to predator-induced fear is to:

- react defensively by running
- flapping its wings
- bunching up with other birds and/or
- pecking and striking out at the threat.

Fear behaviour in poultry can also be expressed as tonic immobility (e.g. 'frozen' in fear).

Reactive to Movement

Poultry are very reactive to rapid movement. Rapid movement equals predatory behaviour; predatory behaviour equals fear, and fear equals flight, fight, or freeze.

Reactive if Upset

If an animal is somewhere unfamiliar or where it does not want to be, it will also revert to its 'wild' instinct to flee or to fight.

Animals are most dangerous when they are frightened, surprised, and separated from their flock mates.

Reactive to Change

Birds will react to changes in:

- temperature
- lighting
- odour
- new or unfamiliar people
- drafts or winds
- noises.

Live in the Present

Poultry can only have one main thought at a time. If it is not what you want them to do, you will need to redirect their attention or diminish the stimuli (decrease lighting, for example).

Capable of Hiding Pain

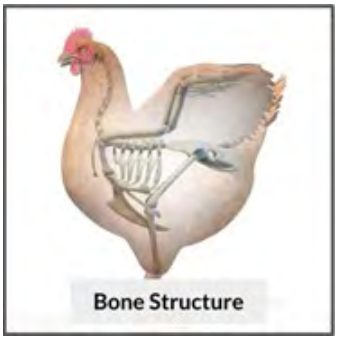

Capable of hiding pain

Birds, like all prey animals, are quite stoic and do not express pain when hurt.

It requires greater awareness and understanding of the appropriate handling techniques and bird behaviour to avoid causing pain and injuries.

PHYSIOLOGICAL CHARACTERISTICS OF BIRDS

Bone Structure


Bone Structure

Birds have two types of bones medullary and pneumatic bones.

Medullary bones are solid (e.g., leg (tibia, femur), pubic bones, ribs, ulna, toes, and shoulder blades). Much stronger bones than pneumatic bones.

Pneumatic bones are important for bird breathing and flight. These bones are hollow and are connected to the bird's respiratory system. (e.g., skull, humerus (first segment of the wing attached to shoulder), collarbone, sternum, pelvic girdle, lumbar and sacral vertebrae). Much weaker than medullary bones.

Muscle and Joints (Legs and Wings)


Muscle and joints (legs and wings)

Joints

- Ligaments and tendons: They are attachment points to bone structures. Be delicate when handling.
- Anatomical limitations: Resect natural angles when handling.

The limbs are not universal joints, delicacy is required during manipulations.

Muscles

- Limited vascularization (minimize flapping). Excessive flapping may lead to deep pectoral myopathy (green muscle disease).

It is believed that excessive contraction of the breast fillet and the tender, the muscles responsible for the up-and-down strokes of the wings, is responsible for the problem.

Feathers


Feathers

For thermal protection:

The structure of the feathers traps air and acts as an insulator, both for hot and cold.

Insulating capacity of feathers (dry vs. wet)

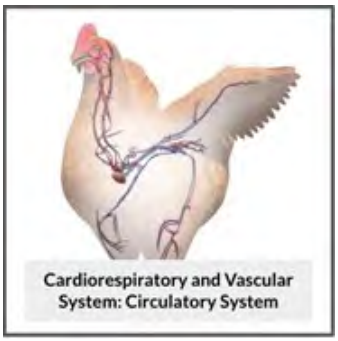
A wet feather, whether by the environment (rain, snow) or by the condensation of moisture in the air (generated by building or transport conditions), can no longer insulate or allow for thermal conduction.

Physical protection

Feathers protect the bird from external damage.

Therefore, the absence of feathers will pose a problem for the thermal and physical comfort of birds in transport, making them more vulnerable to cold and bruising or scratches.

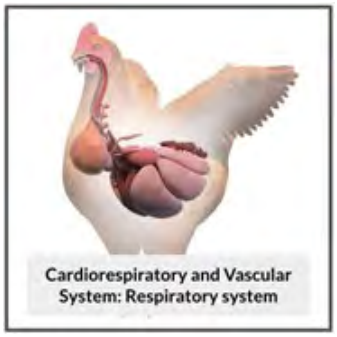
Cardiorespiratory and Vascular System: Circulatory System


Cardiorespiratory and Vascular System: Circulatory System

Birds tend to have larger hearts than mammals (relative to their body size and mass). Poultry hearts also tend to pump more blood per unit of time than mammalian hearts. When they are excited, stressed, or hot, their heart rate increases. This increase generates heat and may aggravate the situation under hot weather conditions.

Blood circulating to certain tissues like the skin, the comb and the legs contribute to heat loss and usually follows the panting behaviour observed when birds try to get rid of their heat through faster breathing.

Cardiorespiratory and Vascular System: Respiratory system


Cardiorespiratory and Vascular System: Respiratory system

Birds are different than mammals. Air flows through their lungs, air sacs (pinkish air balloons on the picture) and some of their bones.

It is the distension and compression of the air sacs that move air in and out, not the lungs. The lungs are rigid and fixed compared to the dilatable lungs of mammals. Air sacs act as bellows to suck in and exhale air, but also to hold part of the total volume. Air sacs fill much of the birds' chest and abdominal cavity and connect to air cavities in bones.

A compressed bird will have more difficulty breathing efficiently, especially when compressed on its chest, or lying on its back.

The respiratory system also serves as a temperature regulator. When hot or stressed, the bird needs its full-breathing capacity to face the challenge.

Reproductive and Endocrine System


Reproductive and endocrine system

This is particularly important when handling replacement pullets.

At 19 weeks of age, pullets have a full ovarian cluster (egg yolks are all bundled like a bunch of grapes inside the abdomen).

Rough handling could cause the rupture of the cluster and cause peritonitis.

This condition is virtually untreatable and often leads to death by infection or euthanasia.

Unlike other animals, poultry don't have a diaphragm, and need to be in an upright position to prevent suffocation if on their side or back.

GENERAL HANDLING & CATCHING

All catching personnel, hired by the farmer or working for a commercial company, has an obligation for the care and welfare of birds they handle.

Poor catching, herding, handling and loading practices are sources of stress and trauma to poultry.

If catchers and loaders are careful, conscientious, and properly supervised, then the y can reduce the number of injuries to poultry.

Prior to catching, it is required that the farmer, or a designate, and catching supervisor walk through the barn, identify birds that shouldn't be loaded and observe the condition of the barn for optimal catch and transport decisions.

During walk through and catching preparation, birds will move away from you as you have entered their flight zone:

- there is potential danger that birds may pile into a corner and smother each other
- to avoid this problem, you may want to dim the lights to reduce their flight zone and their flightiness
- you will have to make a compromise between behaviour control and your ability to visually assess the birds
- this is especially true for new visitors as the birds are used to their daily care takers
- always be alert for birds piling into corners – injuries or suffocation can occur from this.

Once bird fitness to transport and barn conditions have been assessed, it is easiest to catch birds in low or blue light as this naturally calms the birds:

- loading techniques vary from one catching team to the next based on the type of birds and the equipment used for conveyance and transport
- please refer to the standard operating procedures of your employer, keeping in mind the above-mentioned behaviour and physiological characteristics of the birds.

Once birds are loaded into transport containers, they should be able to all rest on the floor at the same time when evenly distributed, while preventing excessive movement within the container:

- containers with birds must be handled, moved, and securely positioned on vehicles in a manner that minimizes stress and/or injury to birds
- parts of birds must not protrude from containers in any way that can cause injury or impede movement.

Catching Birds

Catching Free Run Birds

- For easier catching and loading, chickens, turkeys, ducks and geese raised as free runs or in non-cage housing, they may be first corralled (walked in a narrower pen or section of the barn).
- These heightened density areas are temporary for the time of catch and may be delimited by a wire mesh fence or birds could simply be held in place by lowering the lights once moved into the desired area.
- It is important to constantly monitor the birds during the process to avoid overheating and overcrowding.

Catching Birds in Confinement

Related to the handling, catching and loading of birds raised in cages, enriched cages or community cages, they must all be:

- handled in such a manner that minimizes stress and/or injury
- handled and caught by trained and competent personnel
- provided with a catching area which promotes safe and humane handling and catching.
- in an upright position after being loaded into containers.
- loaded in containers in such a way that permits all of them to rest on the floor at the same time when evenly distributed, while preventing excessive movement within the container.

GOLDEN RULES OF BIRD HANDLING

When Handling Poultry

- ***Sick or injured birds should not be loaded.***
- ***Birds like all prey animals are quite stoic and do not express pain when hurt.***
- ***Assess them well to avoid loading unfit birds.***
- ***Minimize the passing of birds between people.***
- ***Do NOT swing, throw, or drop birds.***
- ***Mechanical catching and conveyors can be done as long as the equipment is humane for poultry handling.***
- ***NO EXCEPTION TO ALL ANIMAL CARE BEST PRACTICES AND REGULATIONS.***
- ***Birds that escape during loading or unloading should be caught immediately.***

Reminder on General Handling Guidance (According to HAR-Part XII - Transport)

Handling

Animals are handled during loading, confinement, transport and unloading in a manner that does not cause suffering, injury or death.

When an animal is in a container, people involved in the transport process must not:

- drop, kick or throw the container
- handle the container in any other manner that is likely to cause the animal's suffering, injury or death
- every animal is handled during loading, confinement, transport and unloading in a manner that does not cause or is not likely to cause suffering, injury or death
- animals will be loaded and unloaded using equipment that is designed, built, constructed and maintained to prevent likely suffering, injury or death.

Understanding animal behaviour is an important skill for humane transportation. Animal handling should be quiet, patient, efficient, safe, low stress.

Mishandling animals in frustration (for example, beating, lifting, dragging, etc.) causes unnecessary suffering and is prohibited by Part XII of the HAR.

Predicting potential problems and preventing them is key.

An animal **does not** have to **suffer** an injury before enforcement action can be taken. Handling animals in any way likely to cause suffering, injury, or death is also **non-compliance**.

It is unacceptable to knowingly harm an animal during any phase of the transport continuum.

Handling of Containers and Conveyance

The regulated party must handle each container, including a cargo container, and the conveyance in a manner that:

- does not cause injury suffering or death to any animal contained within
- is not likely to cause any injury, suffering or death to any animal contained (for example, do not throw, drop or kick the container, do not drive in a manner that causes injury).

Specific to conveyances and container (in the context of ground transport of poultry)

Conveyances and containers are designed, constructed, equipped, maintained and used to prevent animal suffering, injury or death.

In addition, the conveyance and the container, if the animal is within either, must:

- be suitable for the species of animal
- prevent the animal's escape
- provide adequate ventilation for each animal
- provide a floor that prevents the animal from tripping, slipping and falling
- be free of exposed bolt heads, angles or other projections
- have secure fittings
- do not contain objects that are unsecured
- be cleanable (unless the conveyance or container is designed for one-time use) as a measure to ensure adequate biosecurity and disease prevention
- not be likely to collapse or topple over.

If using a container on a conveyance, the container must be secured to the conveyance in a manner that prevents it from moving during transport.

DAY OLD

Codes of Practice

Holding, Loading, and Transporting Chicks, Poults, and Ducklings

- ***It is important that stress is minimized throughout the transport process and that chicks and poults arrive at their final destination in good condition***
- ***Chicks and poults possess energy and water reserves in the form of the yolk sac, which serves to sustain chicks and poults for a period of time after hatch***
- ***Depending on the strain, these reserves can sustain chicks and poults for up to 72 hours and, along with appropriate thermal conditions during transport, help to protect chick and poult health.***

It is the **responsibility of the hatchery** to ensure that chicks and poults are **fit for the intended journey**.

Fit chicks and poults are those in good physical condition and health that are expected to reach their destination in good condition.

Requirements

- Boxes containing chicks or poults
  - must be moved smoothly and in such a way that the chicks or poults do not pile or become trapped
  - must not be thrown or dropped.
- Appropriate environmental conditions must be maintained throughout the transport process to ensure that chicks and poults arrive at their final destination in good condition.
- Chicks and poults must be able to stand erect during transport.

Recommended Practices

- Provide no less than 24.5 cm^2 (3.8 in^2) box floor space per chick and 27.1 cm^2 (4.2 in^2) box floor space per poult. The maximum group size for a single compartment should be adjusted according to the equipment specifications.
- Adjust vehicle temperature prior to loading chicks and poults to prevent them from becoming overheated or chilled.
- Monitor and adjust ventilation, temperature, and spacing of boxes so that chicks and poults are able to maintain their normal core body temperature.
- Minimize the change in environment if, during transportation, boxes are to be transferred between vehicles.
- Maintain holding areas for boxes of chicks or poults at a temperature range of 21-27°C (70-80°F) and a relative humidity range of 40-60%.
- Monitor the vent temperature of a sample of chicks and poults during holding to ensure that they maintain a normal core body temperature range (39.5-40.5°C [103-105°F]). A human ear thermometer is a good tool for this application.
- If travelling in a non-climate-controlled vehicle, consider both the outside temperature and the duration of transport when determining the optimum density of chicks or poults in boxes. In hot weather or when transporting chicks or poults over long distances, reduce the packing density.
- Use clean boxes. Keep vehicles used to transport chicks or poults clean, and disinfected or sanitized, and in good working order to ensure that chicks and poults arrive at their destination in good condition.
- Check chicks and poults at random to ensure that they appear, behave, and sound normal prior to departure.
- Deliver chicks and poults as soon as possible after hatching.
- Deliver all chicks and poults destined for any given barn floor at the same time to avoid challenges associated with meeting different age-related needs.
- Provide gel pucks or alternative sources of hydration to chicks and poults when the duration between hatch and placement is expected to exceed 24 hours.

Tips when handling day-old poultry and pullets

- Make sure boxes containing live chicks or poults are always moved smoothly and placed on a flat, level surface.
- They should not be tilted more than 20° from horizontal at any stage of loading or unloading.
- Full boxes should never be thrown or dropped.
- If trays are tipped to remove the chicks, it must be done in such a way as to prevent pile-up.
- Birds should never be squeezed during handling.
- Chicks/poults should not be subjected to falls or drops of more than 15 cm (6 inches) on a hard surface, or more than 30 cm (12 inches) on a soft surface, if there is no ramp.
- When removing birds from boxes by hand, form a scoop with your hands and do not squeeze the birds.
- Extra care should be taken when handling pullets because any injury they may sustain will have long term impact.
- Care should be taken to minimize temperature extremes during transit and offloading.

CHICKEN-TURKEY BREEDERS

Codes of Practice

Correct handling methods are essential to prevent stress and injury, and to allow personnel to effectively monitor the health of the flock.

Being in an inverted position (upside down) for any length of time is stressful for birds and can cause discomfort.

Requirements

- Birds must be handled at all times in such a manner that minimizes stress or injury. Birds must not be carried solely by the head, neck, one wing, or tail feathers.

Recommended Practices

- Carry birds in an upright position.
  - **Note**: Remember that this position would be ideal to respect the bird physiology. It is currently tolerated to carry chicken downward by their legs if it is done carefully and for short distances.
- Minimize time holding or carrying birds.
- Wear clothing of uniform appearance during the whole production cycle to minimize excitement of the birds when personnel enter the facilities.
- Perform routine activities consistently.
- Ensure that the movement of people and equipment within the barn is quiet and smooth.
- Give an easily perceptible signal to the birds before entering the barn to prevent them from being startled. This practice is particularly important when the light intensity or noise is greater outside the barn than inside.
- Release chickens by setting them down on their feet or from low heights that enable them to land normally, feet first.
- Avoid releasing in such a way that requires flying.
- Carry heavy turkeys by both legs and one wing, and release gently on the floor on their breasts. Gently set small turkeys down on their feet or their breasts.

Poultry transportation is a shared responsibility between all stakeholders.

It is recognized that by its very nature, the transportation process (which includes catching, loading, transporting, and layering) includes stress and risk of injury.

Tips when handling Turkeys

- When loading turkeys use two hands to support birds and strategically place them into a bin utilizing the legs and wing or legs and breast.
- For mechanical loader utilize the neck and support the rear of the bird.
- Because of the size and weight of heavy toms and breeder turkeys, it is recommended they be handled with extra care to prevent injury during catching. If caught manually turkeys should be caught one bird at a time.
- Heavy turkeys should be carried by both legs and one wing. Turkeys cannot be carried by the wings only or the neck.
- When setting heavy turkeys on the floor, it is best to set them down on their breast.
- Use herding corrals/gates and herd small groups of birds towards the loader.
- Work together to herd birds using flags, bags or brooms to encourage birds to move (visual cues).
- Based on the size of turkeys do no more than three birds at a time, two in one hand and one in the other.

PULLETS & LAYING HENS

Codes of Practice

Correct handling methods are essential to prevent stress and injury, and to allow personnel to effectively monitor the health of the flock.

Being in an inverted position (upside down) for any length of time is stressful for birds and can cause discomfort.

Requirements

- Crews must be overseen by the producer or a competent designated representative, who must be readily available throughout the catching and loading process
- Corrective action must be taken if crews or individuals are observed handling birds in ways that compromise their welfare
- All on-farm and contracted personnel involved in catching must be competent in handling birds, and must not handle birds in such a manner that causes injury or distress
- Birds must be placed in transport containers gently and in a manner that allows them to rapidly regain an upright position
- When catching birds, light intensity must be low enough to keep birds calm
- Easy access to each cage must be provided for catchers.

Recommended Practices

- Catch individually and hold in a comfortable upright position with both hands as birds are transferred to the transport container. If not possible, birds should be carried by both legs, and care should be taken to minimize pressure on the legs by appropriately limiting the number of birds carried in each hand.
- Corral birds with a net or screen at the loading door when loading from floor systems.
- Use the lowest light level possible that will not compromise worker safety, or use blue lights, which will calm the birds while providing better visibility for catchers.

- Consider catching in the dark, with catchers utilizing night vision goggles.
- Use catchers that have been trained in humane catching and handling methods and that have been certified as such where available.
- Limit the number of times that birds are transferred between catchers and minimize the need to manually handle birds as much as possible.
- Place containers as close as possible to the birds prior to catching.
- Use humane methods when restraining birds.
- Release birds by setting them down on their breast or their feet.
- Verify flocks and barn condition with the catching supervisor prior to catching.
- Check for hindrances from fixtures and fittings, especially sharp edges or protrusions, prior to catching birds.
- Move birds housed in free-range with access to outdoors systems inside prior to catching.

Tips when Handling Pullets and Laying Hens

End of Lay Hens

- Remove birds from cages by two legs.
- Remove only one or two birds from a cage at a time.
- Minimize the passing of birds between people.
- Always place birds down gently and upright in the liner.
- When handling floor birds, the passing of birds between people should also be minimized.
- Herd birds in a way that will not cause smothering or piling.
- When loading, place birds upright and gently inside the crates/modules.



WATERFOWL

Correct handling methods are essential to prevent stress and injury.

To use proper handling techniques that meet the needs of waterfowl, it is important to have some concepts of physiology and duck welfare.

Requirements

- Birds must be handled at all times in such a manner that minimizes stress or injury.
- Birds must not be carried solely by the head, top of the neck, wings, tail feathers or legs.

Recommended Practices

Herding & Loading

- Wear clothing of uniform appearance during the whole production cycle to minimize the excitement of the birds when personnel enter the facilities.
- Give an easily perceptible signal to the birds before entering the barn to prevent them from being startled. This practice is particularly important when the light intensity or noise is greater outside the barn than inside.
- Ensure that the movement of people and equipment within the barn is quiet and smooth.
- There must be sufficient personnel on hand to ensure that the herding operation runs smoothly.
- There must be sufficient personnel to ensure that the herding operation runs smoothly.
- Ducks must be guided smoothly towards the mouth of the ramp, and the ducks guided gently to allow the smooth loading of the ducks into the transport coops.
- Minimize the distance to reach the loading area.
- Watch for signs and act to prevent overcrowding, such as if the ducks start piling or flapping their wings excessively.
- Maintain constant vigilance throughout loading to ensure that no ducks are injured.
- Recognize signs of distress in ducks and know how to care for these birds.
- Do not load unfit ducks that show signs of distress. A period of rest is usually enough to allow the duck to recover and be loaded. If the duck has not recovered after an hour, it is not likely that it ever will, it may need euthanasia.

Catching & Carrying

Catching

- Catching must be performed quietly, quickly, and smoothly with care to avoid unnecessary pain and distress to the ducks.
- Catch ducks by the base of the neck or the body or by grasping both wings in one hand.
- Set the ducks free or support them 20 seconds after being caught.

Carrying

- Keep holding and carrying time to a minimum.
- When ducks are lifted by their necks for carrying, the action must be completed in a single, smooth motion.
- Handle ducks with care. Ducks must be carried in an upright position, never upside down, by supporting the body weight to avoid injuries and distress when carrying them.

TIP: When Handling Waterfowl, Never Lift a Duck by its Legs or Wings!

SELF EVALUATION

Evaluate your livestock handling techniques regularly and make improvements to them as needed.

Always strive to get feedback from the growers or the slaughter plant on key handling welfare parameters to evaluate your handling techniques.

"You can only improve what you measure." - Dr. Temple Grandin

Factors to consider include the percentage of animals:

- with broken or dislocated wings
- with broken or dislocated legs
- with injuries
- that were dead on arrival – DOA's (transport mortalities).

Increasing levels of the above handling events may indicate a need for lighting, noise levels, equipment, handling methods, or environment changes. falling (belly or torso touches the ground) during handling.

Indicators of Good Handling

Assess your handling technique and make/propose improvements to facility design, flooring and handlers' techniques using the following objectives.

- Wing damages should be less than 3.0% per load.
- Leg damages should be less than 0.4% per load.
- DOA's averaging over 0.5% on a weekly basis requires a documented investigation and corrective action. Recognizing that transport conditions (duration, temperature, humidity, tarping strategies, lairage, etc.) potentially have a bigger impact on DOAs, poor handling/loading conditions may also impact DOAs (throwing/dropping birds in crates, loading wet birds, etc.).

Self Audit

You can approach the self auditing exercise in a more formal and documented manner.

Self audits are a good introspection tool; when well documented, you can track your progress from time to time.

4 COMMON CONTINGENCY PLANNING

COMMON CONTINGENCY

Although the goal of each animal hauler is to get the animals to their destination safely and in a timely manner, risk factors do exist with each load transported. Drivers must not only make themselves aware of these risk factors and try to mitigate them, but they must also have a plan in place to deal with situations if they should occur.

In the event of an emergency, drivers have a responsibility towards the animals, the company and the agriculture industry. These responsibilities include:

- being aware and prepared to handle emergencies
- ensuring the transporter's personal safety and an awareness of public safety
- responding to the situation professionally
- ensuring the well-being and humane treatment of the animals
- protecting company property (i.e. animals, equipment)
- projecting a positive perception of the company and industry.

Regulations

Humane animal transportation is complex and dynamic.

Things can go wrong.

Responding appropriately to an evolving situation requires knowledge, skill, and planning.

Click the link to read: Health of Animals Regulations Part XII: Amendment to the Transportation of Animals Regulations Guidance Document for Regulated Parties.

Under the Health of Animals Act Part XII, commercial haulers and those who transport animals during business are required to have contingency plans.

By being prepared, the driver will respond effectively when an emergency can't be prevented and lessen the impact of the delay on the animals and on themselves.

What is a Contingency Plan?

A **contingency plan** is a set of actions to address unusual or unexpected transport events.

The regulation does not specify what situations a contingency plan must cover specifically.

However, the Health of Animals Act Part XII mentions:

- compliance will be evaluated on whether the contingency plan was available and implemented
- the plan should anticipate events that could happen and decide proactively what actions would need to be taken to address the situation
- everyone concerned by the plan should understand its goal
- the plan must be practical and realistic and include a clear communication plan.

The following section presents the three main components of the emergency plan:

- purpose of the plan
- risk factors and potential hazards
- communication.

CONTENT OF THE EMERGENCY RESPONSE PLAN

Purpose of the Plan

All commercial **haulers** and people **transporting animals** in the course of **business**, or for **financial benefit**, such as producers hauling their animals to assembly, must have a contingency plain in place for the transport of their animals or the animals of their clients.

The main **purpose** of this plan is to **prevent** animal suffering, injury or death in transport.

The transport of animals is completely different from other types of transport.

Working with living beings brings its own set of challenges and unforeseen events.

- Animals are sentient beings that have biological needs.
- Animals react according to the environment they're in.
- Animal's state changes over time.
- Animals can be unpredictable.

It is essential to control what we can and try to mitigate the impacts of uncontrollable elements. Consideration should be given to anything that could alter the original transportation plan. Once faced with an emergency, actions must be taken to regain control of the situation and limit repercussions on animals.

Risk Factors and Potential Hazards

Each animal move is different because there are many diverse animal transportation risk factors involved, some that can be controlled, others that cannot:

- fitness of individual animals on-board
- age and characteristics of the animal
- relocation history of the animals
- distance of the planned journey
- environmental conditions
- detours, construction delays
- load configuration (weight & density)
- equipment failure
- sudden and unexpected complications.

By being **prepared** for an emergency before it happens and **understanding** how to **prevent** and **respond** to an incident involving animals effectively, the **welfare** and **safety** of the first responders, the handlers and the animals will improve dramatically.

A combination of risk factors that go unchecked will increase animal welfare risk at some point during the journey.

If the needs of the animals are not taken care of, the result may be injury or death to individual animals or a significant portion of the load.

	Hazard Category
1.	Human factor
2.	Animal
3.	Mechanical
4.	Minor delay
5.	Major delay
6.	Environmental conditions
7.	Minor accident
8.	Major accident
9.	Incident at plant
10.	Activists

The probability (P) and impact (I) of each risk can be evaluated with respect to humans (H) and animals (A):

Probability (P)

Impact (I)

1 - Very likely

2 - Likely

3 - Unlikely

MH-Major Human

mH-minor Human

MA-Major Animal

mA-minor Animal

This exercise allows for completing the emergency plan risk analysis and improving it. It also allows knowing what element should be prioritized to prevent significant risks with the greatest impact on animals and humans.

1. Human Factor

NOTE 1: This is an example of how it could look in your own contingency plan. Try to keep it simple but informative. A template is provided as an appendix in the manual.

Hazard	P	I	Mitigation Measure
Health status	2	MH, MA	Annual health check-up
Driver fatigue	1	MH, MA	• Respect of the maximum working hours (log completed adequately) • Health breaks when necessary • Etc.
Distraction	1	MH, MA	• Postpone distractions to a better and more appropriate time.

The above information results from a 2007 Canadian study of commercial livestock transportation accidents that concluded that driver error was blamed for 85% of the accidents.

NOTE 2: We have filled up the boxes as an example. Your organization will have to adapt it to its own reality. This format is a suggestion; you are welcome to develop your own, although the principles and outcomes are similar.

Health Status

On the road, animal haulers are in charge of their trucks and the animals they transport. The arrival of the animals in good condition is directly related to the ability of the transporters to maneuver their truck properly and safely.

To do this, they must maintain good health. The likelihood of carriers' distress is minor (stroke, fainting, collapsing) but the consequences would be great on them and the animals. A healthy lifestyle and regular checkup are efficient mitigation measures to prevent emergency situations.

Driver Fatigue

Causes of accident may include driver distraction, speed, poor driving habits and inadequate vehicle maintenance. However, the results of a 2007 study of commercial animal transportation accidents led to the conclusion that most accidents are caused by driver fatigue.

Learn to recognize the signs of fatigue may prevent accidents:

- cannot keep head up
- eyes won't stay open or go out of focus
- drift over the centre line or the shoulder line
- thoughts wander
- miss a road sign, exit or a gear
- don't remember passing certain landmarks or towns
- see things that are not there
- reflexes begin to slow.

Distraction

Distractions must be avoided at all times.

This includes, but is not limited to, texting, eating, drinking, talking on the phone, reading and reaching for items on the floor or across the seat.

Basically, any other task that interferes with your driving and split your focus.

Becoming aware of the most common human causes of accidents is one of the keys to accident prevention:

- ensure sufficient sleep is obtained each day
- if you drive during the night, ensure your schedule allows for a quiet, restful sleep during the day
- taking power naps lasting 15 - 20 minutes can be beneficial
- eat a balanced diet and have regular mealtimes. Drink plenty of water and exercise
- regular medical check-ups are important
- if you feel too drowsy to drive pull over and contact your dispatcher and inform them of the situation

- take frequent breaks if necessary. Stop and stretch for 5 minutes
- do not take over-the-counter stimulants to ease drowsiness
- keep the truck cab comfortable, but not too warm. Heat may make a person feel tired. Allow fresh air into the cab and turn on the radio or play music.

2. Animal Factor

Hazard	P	I	Mitigation Measure
Animals becoming non-ambulatory or fatigued during transport	1	MA	• Only animals fit for transport are loaded into the trailer • Positive, nonaggressive handling of animals at all times • Minimize the use of electric prods and use them only as a last resort.
Animal at risk	3	MA	• An ambulatory animal, but with some minor risks, may be transported under certain conditions, and if its comfort and safety are not compromised. Driver needs to record animal condition and special conditions taken.
Feed, water and rest	2	mA	• Ensure that feed and water withdrawal guidelines have been followed. Record details • Respect transport times accordingly as described in laws and regulations.
Intense heat	2	MA	• Evaluate the density of the animals in the trailer and decrease by 25% on days with high temperature and humidity • Keep the trailer moving and ensure constant ventilation • Load and travel outside the peak temperatures of the day • Adjust your ventilation accordingly (panels) • Use of sprinklers where available.
Intense cold	1	MA	• Avoid overloading the trailer and forcing animals against the trailer walls • Manage side panels accordingly • Slow down driving speed to conserve more heat.
Animal accidentally falls off the trailer OR Animal escapes from transport cage	3	MA	• If possible, isolate the animal for its protection and that of the public • Assess the animal's condition • If fit for transport attempt to load as soon as possible • If unfit, isolate and protect the animal until it is euthanized.
Animal trapped in trailer (by equipment, doors, ramp, others)	3	mA	• Ensure equipment is in good condition before loading animals • If the animal cannot be extracted without undue suffering, it will have to be euthanized at this location.
Overcrowding	3	MA	• The company has a loading plan for each trailer • Each compartment has a maximum number of animals allowed according to the season and the weight of the animals to be transported.

Knowing that the **objective** of a contingency plan is to **prevent animal suffering**, injury or death in transport, animal factors should be a **central component** of it.

Living beings' **states evolve** with time and can **lead to an emergency**.

Unfit or **compromised animals**, weather, density, equipment and so on are all potential risks that could meddle with safe transport.

Be sure to:

- assess the condition of animals entering the trailer
- isolate at-risk animals (e.g., animals showing lameness)
- be aware of the day's weather conditions and adjust accordingly
- work with equipment that is in good condition to prevent animals from falling or escaping during loading and transport.

3. Mechanical

No one is immune to mechanical malfunctions. However, some actions can be taken upstream to limit the occurrence of these situations:

- drivers should perform a pre-trip inspection of the truck and trailer
- be satisfied that the motor vehicle is in safe operating condition before leaving
- if applicable, review the last Driver Vehicle Inspection Report and ensure any required repairs have been made.

Hazard	P	I	Mitigation Measure
Engine failure	3	mA	• Mechanical aspect: maintenance done and recorded • Animal aspect: ventilation, define acceptable delays before requesting a reload in another vehicle.
Flat tire	3	mA	• Follow company flat tire procedure.

In the case of a **mechanical breakdown** of the tractor, **determine** the nature of the breakdown and **estimate how long** the repairs will take.

If the **repairs cannot take place** at the site of the breakdown or they will take an extended period, **arrange for another tractor** to be sent to take the trailer.

If the **problem** is with the **trailer** (or if the unit is a straight truck and cannot be repaired on the road), the **animals must be transferred** to another unit to complete the journey.

There are several considerations when transferring animals to another trailer:

- assess the safety of the location. If it is a heavy traffic area or on a narrow road, have the unit towed to a safe area for transfer if possible
- can another semi-trailer manoeuvre close enough to do an end-to-end load or will a portable loading ramp be needed requiring the animals to be off-loaded into an open area and then reloaded? There may be circumstances where only smaller stock trailers can get to the disabled unit
- if the animals must be off-loaded and reloaded, ensure proper containment is available to hold the animals between trailers
- before any action takes place, call the local police or fire department for assistance with traffic.

4. Minor delay (less than an hour)

5. Major Delay

Hazard	P	I	Mitigation Measure
Plant breakdowns resulting in delays in unloading	1	MA or mA	• Keep in touch with the plant dispatcher • The dispatcher communicates the information to the animal hauler • In case of a delay greater than one hour have the trucks circulate on the highway.
Road construction	1	MA or mA	• Research for intended routes • Look out for alternate routes • Contact the origin and the destination contact person to inform them of the nature of the delay and determine the best plan of action.

Any incident that stops a loaded animal unit, from a minor delay at a construction site to a slaughterhouse breakdown resulting in delays, is cause for concern because loaded units depend on airflow to maintain an acceptable environment in the animal compartments.

Time in transit is a critical factor as well, and expedient delivery of a healthy load of animals to the destination point is the goal of every driver.

Slaughterhouse breakdown resulting in delays.

THE TRANSPORTATION OF ANIMALS NEEDS TO BE PLANNED.

During transit, there may be delays at the slaughterhouse, delaying the unloading of the animals. Mitigation actions can be taken directly at the slaughterhouse, depending on the delay.

If the delay is longer, keeping the vehicle moving or even returning animals to the original loading site may be possible solutions. The animal hauler must communicate with the dispatcher when this situation occurs to determine what is best.

Road Construction

In the case of road construction, the driver should investigate if there are any alternate routes.

If there is concern about the well-being of the animals, the driver should contact the local authorities and explain the animal situation to gain permission to move through or receive assistance to turn around.

Numerous factors need to be taken into consideration when determining how long animals can safely be left on a stationary trailer:

1. weather (see species specific module)
2. fitness of the animals
3. age of the animals
4. elapsed time since consumption of food and water
5. location of the delay (i.e., rural area vs. freeway)
6. time of day
7. safety of animals at current location.

Main guidelines to follow:

- avoid known delays by researching intended routes
- plan alternate routes if necessary
- the well-being and safety of the animals must be considered at all times
- do your best to keep the animals comfortable and safe
- constantly monitor the comfort and condition of the animal
- animals must be protected from extreme weather conditions
- the driver should contact the origin and the destination contact person to inform them of the nature of the delay and determine the best plan of action.
- keep the vehicle moving as much as possible.

6. Environmental Conditions

If the weather conditions are bad or create poor road conditions, the truck should be pulled over in a safe area, preferably where the animals will be protected from as much weather as possible.

The driver should park the truck far away from other traffic to reduce the risk of other vehicles hitting the unit.

The carrier should contact the dispatcher for steps to be taken based on the emergency.

Hazard	P	I	Mitigation Measure
Snow storm	2	mH, MA	Travel only if safe; • adjust truck tarp to suit conditions to protect animals, while ensuring minimum ventilation • maintain contact with the slaughterhouse dispatcher • re-route when conditions permit • return animals to original loading site.
Ice storm	2	mH, MA	
Strong wind	2	mH, mA	
Severe thunderstorm	2	mH, mA	
Reduced visibility (for any reason)	2	MH, MA	

7. Minor Accidents

8. Major Accidents

Hazard	P	I	Mitigation Measure
Collision	2 or 3	mA, mH	Follow the general incident response procedure.
Uncomplicated off-road incident	2 or 3	mA, mH	Follow the general incident response procedure.
Complicated off-road incident	2 or 3	MH, MA	Follow the general incident response procedure.
Roll over	2 or 3	MH, MA	Follow the general incident response procedure.

Accidents involving loaded animal units can be very serious, especially if injured and scared animals are accidentally released onto the roadway.

Minor accidents can be treated much like delays.

Commercial Animal Transportation Accident Statistics

- 59% of the accidents occurred between 12:00 midnight and 9:00 a.m
- 80% involved a single vehicle
- Driver error was blamed for 85% of the accidents
- In 83% of the accidents, the vehicle rolled over
- 84% of the trucks rolled to the right
- Only 1% of the reports identified weather conditions as the cause of the accident and the winter months did not record the highest number of accidents
- More accidents happened in October, followed by November, August, April and May
- 56% of all accidents involved cattle trucks; 27% involved pigs and 11% poultry.

Economic Losses to the Transporter

When a knowledgeable response team handles an accident, the economic losses to the transporter and animal owner can be significantly decreased because:

- fewer animals may need to be put down
- the salvage operation will protect the structural integrity of the trailer whenever possible
- the rescue and recovery procedure is performed efficiently.

Serious Accidents

Serious accidents such as rollovers or collisions that result in animal escape are further complicated because of three factors:

- the accident scene is classified first as a motor vehicle accident with possible human injury. Within the original accident, there is an animal incident occurring simultaneously
- most first responders have limited or no experience in animal handling and recovery, especially scenarios involving stressed or injured animals
- in turn, most animal handlers have limited experience or training in rescue and recovery of stressed animals at the scene of an accident.

What to Remember

Once rescue and recovery can begin, there are a few key points to remember.

- 84% of all rollovers roll to the right-hand side
- Extrication procedures differ based on trailer positioning and style
- Fire departments are in charge of cutting the trailer open
- Never tear a trailer apart with a tow truck or winch
- Never enter a rolled trailer loaded with animals
- Never upright a loaded trailer
- Do not load compromised or unfit animals - they must be euthanized at the scene
- Deadstock removal is a user-pay service.

Transport Vehicles Should Contain

All transport vehicles should contain:

- the emergency contact sheet
- emergency warning devices
- accident information sheet
- company accident policy sheet / Standard Operating Procedures
- fire extinguisher
- a spill kit.

Incident Response

The condition and welfare of the driver is the primary concern. If the driver is uninjured and physically able to do so:

1. Call 911 if the accident occurs on a public roadway or if emergency assistance is required for an on-farm incident. Advise the operator of the location of the incident, the fact you have animals on-board, and the status of any loose livestock. Suggest that police and fire approach the scene with sirens off, if possible.
2. In the event that the vehicle catches fire, call 911 immediately, attend to your personal safety and call your dispatcher. If you leave the vehicle take all documents with you.
3. Set out emergency warning devices immediately.
4. Call the designated company contact. If the company has a dispatch checklist for incidents, proceed through the list. If not, inform the dispatcher of the location of the incident, if there are any injuries, the condition of animals, the position of the trailer, the number of vehicles involved and if first responders are on the scene yet.
5. Call other designated contacts according to company protocol. **These could include but are not limited to:**
   - the insurance companies for the cargo
   - the vehicle
   - the destination.

   Ensure you provide each contact with the same information.
6. If the tractor and/or trailer are damaged and unable to move, proceed to point 7. If damage is minor, the trailer is upright and there are no injuries, take photos and record names and addresses of other people involved and witnesses.
7. Herd any loose livestock from the road and gather them in an area as far from traffic as possible.
8. Locate the incident reporting kit and camera. Take photos of the incident as soon as possible. Photographs should include pictures of road conditions, vehicle damage, trailer position, the overall scene, skid marks, curves, intersections and where the vehicle left the road (if applicable).
9. Provide as much protection and comfort for the animals as possible.
10. Release statements only to persons of authority (i.e. police, fire). Do not talk to media or bystanders about the incident or the load you are transporting.
11. **When first responders (fire/police /ambulance) arrive on the scene, brief them on the following incident details:**
    - any human injuries
    - type of animals
    - number of animals
    - status of any loose animals
    - known hazards
    - your company emergency plan (i.e. any resources on the way, company emergency numbers).
12. Respect the accident scene chain of command - assist if needed.
13. **Rescue and Recovery**

- 84% of all roll overs roll to the right-hand side. (Woods, 2007)
- Extrication procedures differ vastly for a liner that rolls on the left-hand side versus the right hand side - or - fat trailers versus standard commercial livestock trailers
- Fire departments are in charge of cutting the trailer open
- Never tear a trailer apart with a tow truck or winch
- Never enter a rolled trailer loaded with animals
- Never upright a loaded trailer
- Do not load unfit animals following an incident. They must be euthanized at the scene
- Deadstock removal is a user-pay service.

If damage is minor, the trailer is upright, and there are no injuries, take photos and record the names and addresses of other people involved and witnesses.

Preventive actions to take into consideration any time animals are in transit:

- do not allow the truck or trailer to get too close to the edge of the ditch while driving down the road or turning in or out of driveways
- always drive with care and awareness of the vehicles around you. Posted speed limits should be observed and speeds adjusted for current road, weather and traffic conditions. Do not tailgate, play road games with other drivers, pass illegally or attempt to beat traffic lights or railroad crossings
- a driver must always be aware of the hazards of driving on farm roads, as they are often narrow, with soft shoulders that may collapse under the weight of a heavy truck.

9. Incidents at the Plant

Note: Animals waiting at the slaughterhouse are considered in transit; this section is less pertinent to the transporter but is a key element of the slaughter plant contingency plan.

Hazard	P	I	Mitigation Measure

Fire	1	MH, MA	• Sprinklers are in place in the animal holding area
			• If an evacuation of the premises is required:
			  • evacuate humans safely
			  • if possible, assist the fire department in the execution of the animal evacuation plan
			  • the plan has been communicated and reviewed annually with the municipal fire department.

Gas leak	1	MH, MA	If evacuation was required: • safely evacuate humans • if possible, assist the fire department in carrying out the animal evacuation plan.

While the animals are waiting at the slaughterhouse, emergencies such as a fire may occur that would lead to the evacuation of the animals on site.

If this happens, the animal hauler must work with the slaughterhouse to secure the loaded trucks.

These situations are part of the slaughterhouse's emergency plan, and the trucker must follow their procedures.

10. Activists

Hazard	P	I	Mitigation Measure
Activist block the road	2	MH, mA	If no safe detour possible: • remain calm and courteous • remain in the vehicle and do not interact with protesters • stop the trailer • call 911 • call the recipient • call the dispatcher
Activists surround the trailer and demonstrate	2	MH, mA	• Stay in the vehicle and do not interact • Remain calm and courteous • Stop the trailer • Call 911 • Call the recipient • Call the dispatcher.

The Animal Supply Manager will be responsible for promptly contacting truckers in transit to alert them of the situation.

- Share details of the location of the protesters.
- Do not interact with them (do not talk to them, provoke them).
- The protesters will likely film their presence, as they want to make their actions public.
- If protesters block a truck, the driver should remain calm and call the factory, who will call the police if they are not already there.

COMMUNICATION

If risk factors arise, despite the prevention measures in place, good communication between animal transport intermediaries must be in place to remedy the situation as quickly as possible.

When an incident occurs, the condition and welfare of the driver are the primary concern.

They can begin the emergency procedure only when the driver is sure that the vehicle is in good condition.

Communication Documents

Important communication documents should be available in each truck:

- emergency contact sheet with 24-hour phone numbers for dispatch, insurance companies and deadstock services
- a list of resources that would be required in the event of an animal transport unit rollover such as snow fences for containment and stock trailers which will need to be provided to company dispatch and first responders.

Emergency Devices

Once the emergency devices have been set, you will need to:

- call the designated company contact
- if the company has a dispatch checklist for incidents, proceed through the list
- if not, inform the dispatcher of the location of the incident, if there are any injuries, condition of animals, position of trailer, number of vehicles involved and if first responders are on scene yet.

Designated Contacts

Call other designated contacts according to company protocol.

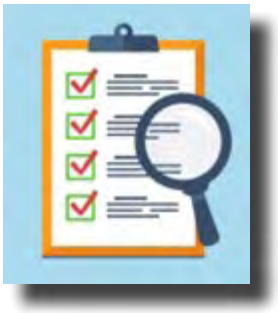
These could include, but are not limited to:

- the insurance companies for the cargo
- the vehicle
- the destination.

Ensure you provide each contact with the same information.

Relevant Information

While you communicate with the interested parties, make sure to give all information that might be relevant to the situation:



- status of the incident
  - accident
  - undesirable weather conditions
  - activists
  - delay
- type of animals in transit
- number of animals in transit
- state of animal in transit
- human injuries, if any
- status of any loose animals, if any
- known hazards
- your company emergency plan.

5 BIOSECURITY

BIOSECURITY PRINCIPLES AND PRACTICES FOR POULTRY TRANSPORTATION

The primary objective of this module is to create awareness, educate, and provide a common understanding of the biosecurity practices needed during poultry transport.

This module is based on the **National Biosecurity Standard for Livestock, Poultry and Deadstock Transportation**, which was developed through a consultative process with participation from a broad cross-section of stakeholders, including industry organizations and federal and provincial governments.

Besides other national biosecurity standards, the standard is also available online on the **Canadian Food Inspection Agency** website.

Click the link to read the National Biosecurity Standard for Livestock, Poultry and Deadstock Transportation NBS.

Click the link to be taken to the Canadian Food Inspection Agency website.

Click the link to be taken to the Avian Biosecurity on the CFIA website.

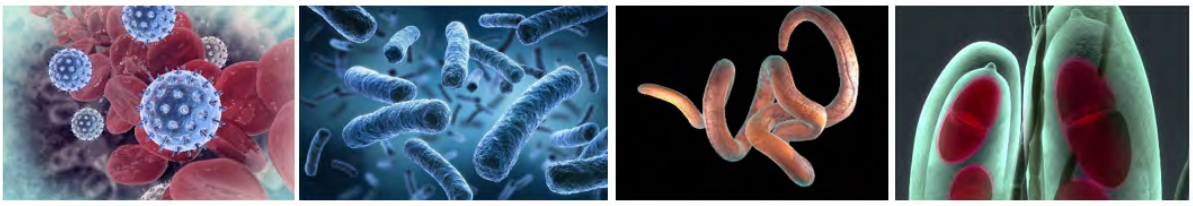
Introduction to Biosecurity

This lesson aims to impress upon you the importance of biosecurity and how transporters can play a role in improving animal biosecurity.

What is Biosecurity?

Biosecurity refers to measures or sets of principles and practices that reduce the risk of introducing and spreading infectious agents that cause animal disease and the spread of plant pests.

Infectious Agents

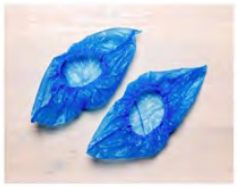


Viruses | Bacteria | Parasites | Fungi

Objective: reduce the risk of introducing and spreading infectious agents.

The basic concept is to prevent animals, equipment, transport unit or yourself from becoming contaminated with a disease agent, also called a pathogen. In a situation where contamination occurs, the goal is to prevent its spread to animals, other locations and equipment.

You already know some biosecurity practices, such as:


Washing your hands/using hand sanitizer 1. Before handling animals. 2. After handling animals.	**Using boot covers OR washing your boots** BEFORE and AFTER being on a premise or being in contact with the animals.	**Following biosecurity signs and protocols** at the farms of origin or destination.

Why is Biosecurity Important?

1. Good biosecurity practices minimize the impacts of disease.
   The benefits of biosecurity outweigh the cost and impact of disease outbreaks.
2. Contribute to maintaining a healthy plant and animal resource base, consumer confidence, and public trust and maintaining and accessing new markets and opportunities.

Disease and pests can negatively impact the environment and human health for the producer and the agricultural community as a whole (including transporters).

Disease and pests can INCREASE:	**Disease and pests can DECREASE:**	**Disease and pests can STOP:**
• animal welfare issues • veterinary and labour costs • producers' effort and time to manage and care for sick animals.	• productivity • value of the animals and products • producers and transporters incomes • domestic consumption of a commodity.	• access to export markets.

Avian Influenza

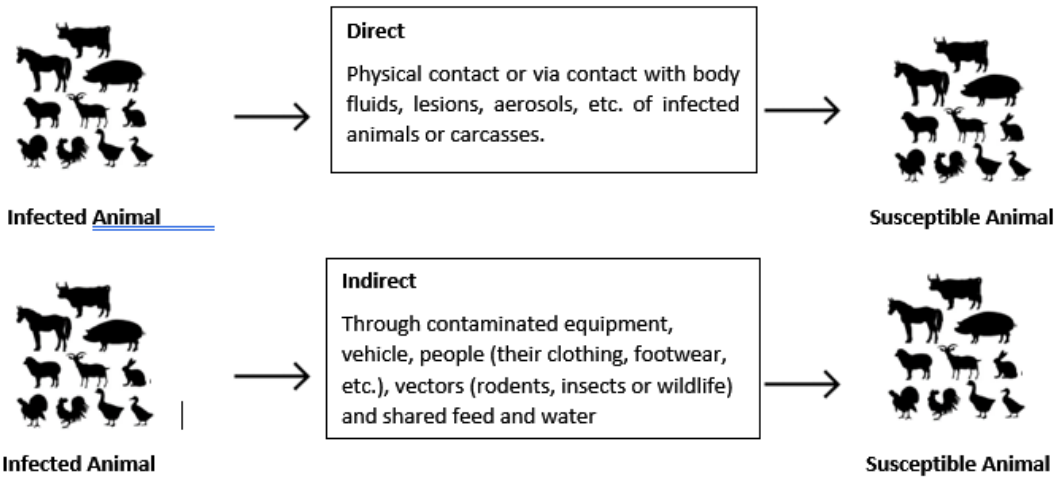
- Disease Status: Canada is no longer considered free of this notifiable avian influenza.
- Highly contagious and significantly affects avian health and production.
- 2004 AI outbreak (British Columbia): economic losses; 17 million birds were depopulated, $63.7 million was paid in compensation for birds ordered destroyed, and there was an estimated $380.9 million dollars in losses for the agricultural community.
- A high pathogenic strain entering Canada in 2022 is already causing millions in damage nationwide.

Foot and Mouth Disease

- The last Canadian disease outbreak took place in Saskatchewan in 1952.
- No occurrences in Canada since then.
- Economic losses included: $722 million + one year's loss of trade in livestock and livestock products.
- Today, the estimated net economic impact of an FMD outbreak on the Canadian economy would range between $6.8 to $48 billion.

BASIC PATHWAYS FOR THE SPREAD OF DISEASE

Disease pathogens can be transmitted from infected animals to susceptible animals either directly or indirectly.



Important to know about disease transmission.

- **Not all** infected animals will show signs of disease. Animals can appear healthy yet still shed disease agents
  - biosecurity measures must be implemented for all transportation events.
- Note that items may be contaminated even if they do not look dirty
  - (i.e. visible presence of manure, dirt or saliva on vehicles, equipment etc).
- Potential for transmission of diseases to humans
  - for example, ringworm, brucellosis, tuberculosis, salmonellosis, etc.

The Significance of Animal Transportation

There are a high number of animal movements and transportation events.

- Transportation from hatcheries to farms
- Transportation of poultry from farms to slaughterhouses.

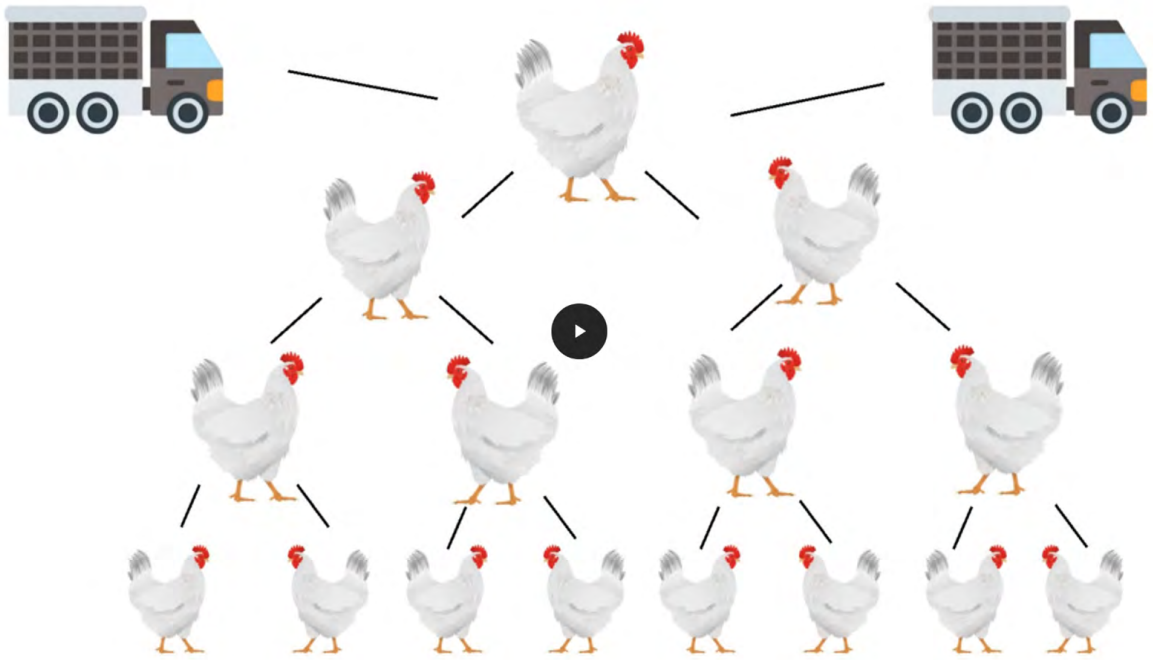
Transportation events present an opportunity for various types of direct and indirect disease transmission between infected and healthy animals.

High risk of transmission of diseases due to the significantly high number of movements.

Every transportation event increases risk of transmission of diseases

ROLE OF TRANSPORTATION

Consider the spread of disease: If just one animal spreads disease to 2 additional animals, and each additional animal spreads it to 2 animals, it can quickly spread to 32 animals.



Now consider the role of transportation.

If one sick chicken is transported, the infection can reach faraway locations across provinces or countries. It will also result in the transmission of infection within the trailers during transportation and later at the destination site, which can be a farm or a commingling site or a final life cycle destination.

Therefore, transporters or drivers have an important responsibility to break this cycle of transmission of diseases by implementing biosecurity measures.

In reality, the transmission of disease isn't always a 1:2 ratio.

When healthy chickens come into contact with infected chickens or a contaminated transport unit or equipment, you can have a transmission rate much greater than a 1:2 ratio.

Alternatively some healthy chickens can get contaminated through excretions and secretions of infected chickens on their body surfaces, without getting infected or showing any clinical signs.

These contaminated yet uninfected chickens may serve as mechanical vector to indirectly spread pathogens to the other healthy chickens in the transport unit

A few chickens in the load may remain uninfected or uncontaminated.

Therefore the health status of the load and the contamination level of the equipment is determined by the bird with the lowest disease status.

Implementing biosecurity practices can break the disease transmission chain.

Every bit of effort in applying biosecurity measures helps to prevent disease transmission.

ROLE OF TRANSPORTERS

Producers are best positioned to implement biosecurity on their farms. However, the transporter is responsible for maintaining biosecurity during the transportation event. Biosecurity is also part of many on-farm food safety and animal care programs across Canada.

Want to read more about it? *Click the link to read the* National Biosecurity Standards.

Transporters can prevent the introduction and spread of diseases by:

- following recommended biosecurity best practices described in this training
- encouraging involved parties to apply biosecurity best practices.

4 MOST COMMON SCENARIOS WHERE DISEASE TRANSMISSION MAY OCCUR

1. **Loading poultry into a contaminated transport unit.**
2. **Contamination** of the transport unit **at the premises** (either during loading or unloading):
   a. consider any contaminated or infected animal, piece of equipment or personnel that comes into contact with the transport unit and is not part of the shipment
   b. parking the transport unit or placing the crates in contaminated areas during loading and unloading.
3. **Contamination of the premises** due to contact with an unclean transport unit or driver:
   a. consider anything associated with the transport unit that comes into contact with the premises
   b. not respecting separation zones at the premises
   c. contact with the animals not to be transported.
4. **Poultry are exposed to a pathogen due to contact with contaminated personnel or equipment**:
   a. contaminated personnel – drivers, facility or service people (catchers, loaders etc.)
   b. contaminated equipment – e.g. crates, modules, curtains, poultry gates and nets etc.

Key learnings

1. ***The impact and cost of a disease outbreak can far exceed the cost of implementing biosecurity measures to minimize the risk of the introduction and spread of disease.***
2. ***Diseases can be transmitted from healthy to susceptible poultry via direct (physical contact , body fluids, etc.) and indirect (contaminated driver, vehicle, equipment, etc.) pathways.***
3. ***Transporters and transport units can rapidly spread infection across a wide area and to a large number of poultry.***
4. ***Biosecurity measures should be implemented at all times (between load phase, loading phase, on the road, and unloading phase).***

BETWEEN LOADS

The between loads phase will focus on activities following unloading and prior to loading subsequent loads.

It will allow you to be prepared to mitigate biosecurity risks associated with the next transportation event. You will learn about routine vs. enhanced biosecurity measures, identifying the client's biosecurity requirements and planning and preparing for the transportation event.

ROUTINE VS. ENHANCED BIOSECURITY MEASURES

What is routine biosecurity?

Baseline level of biosecurity measures applied at all times and for all transportation events:

- implemented for every transportation event, even in the absence of a client specifying any biosecurity requirements
- referred to as the routine biosecurity measures based on basic biosecurity principles
  - loading poultry in clean trailers using clean equipment
  - minimizing cross-contamination between trailers and unloading sites and vice versa
  - minimizing cross-contamination from equipment, clothes and footwear, etc.

Due to regional variations within the country and variations between the various commodity groups, it is impossible to define the routine biosecurity measures that would apply to all commodity groups in Canada. It is recommended that transporters work with the industry associations, provincial representatives and veterinarians to establish routine biosecurity measures that are adapted to their specific risks and challenges.

Biosecurity measures that are appropriate for a given transportation event should consider the

- disease risks associated with animal species to be transported or the disease risks of transporting animals from or to a particular geographical area or establishments
- transporters' role during the transportation phases, and
- logistics, including the availability of biosecurity infrastructure: for example, availability of undercarriage wash facility, baking units, etc.

What are Enhanced Biosecurity Measures?

In situations where disease is suspected or has been identified, and there is an increase in risk, enhanced biosecurity measures are required to control and possibly eradicate the disease from an area.

Enhanced biosecurity measures are targeted toward a specific disease

If a disease is suspected or identified and there is an increased risk. It is targeted toward a specific disease.

Transporters developed it in collaboration with industry associations, provincial representatives and veterinarians to address specific disease transmission risks.

Examples of Enhanced Biosecurity Measures

- Designated transport units and equipment for the transportation of diseased poultry.
- Identified routes for transportation.
- Specific cleaning and disinfection protocols.
- Specific wash facilities exclusively for trailers transporting diseased poultry.
- Additional controls on poultry waste.

For reportable, notifiable or diseases of economic significance, industry, provincial and/or federal governments will often identify specific biosecurity measures for drivers.

Identifying the Client's Biosecurity Requirements

Identify the customer's biosecurity expectations early in the planning phase:

- transporters and their customers need to discuss biosecurity practices.;
  - customers may have specific biosecurity requirements
  - it may be limited to following particular biosecurity protocols when on their premises whereas in other situations the customer's biosecurity requirements may be more extensive.

Allow drivers to make the necessary arrangements to have required biosecurity supplies, documentation and equipment.

In situations where the customer has not identified any biosecurity requirements, follow routine biosecurity measures.

The drivers should use this as an opportunity to educate and encourage the uptake and implementation of biosecurity within the industry.

Factors Influencing a Customer's Biosecurity Requirements

Factors that may influence a customer's perception of the biosecurity measures required for a given transportation event include:

Awareness

The customer's awareness and understanding of biosecurity risks.

Typically biosecurity awareness increases when a disease outbreak has been identified.

Poultry Host Vulnerability

It isn't the same for all poultry. For example, chicks are more susceptible to disease compared to mature poultry. For this reason, hatcheries may have increased biosecurity requirements.

Perceived Risks

Perceived risks associated with the movement type. For example, when moving chicks from a hatchery to a farm, you're going from very biosecure premises to one that's potentially less biosecure.

Cost

Many biosecurity measures will cost the transporter and their customers little to implement. However, some measures, such as a full cleaning and disinfection, and baking, (baking refers to thermal treatment of transport unit) can add costs to the transportation event. If the customer perceives the risk as being low then they may not be willing to pay more for more stringent biosecurity measures.

Risk Tolerance

The risk a person is willing to accept varies greatly from one customer to another. It may also vary within the species or class of animals at the farm, the pathogen of concern, etc.

CUSTOMER'S BIOSECURITY REQUIREMENTS

The customers may have additional biosecurity requirements for cleaning and disinfection during the loading and unloading of animals or while on the road.

Cleaning and Disinfection

- Use specific truck wash stations
- Use of specific cleaning and disinfection protocols.
- Non-use timeframe.
- Specific scrape-out location.

Loading and Unloading

- Follow premises biosecurity protocols
- Use personnel protective clothing when involved in loading and unloading.

On the Road

- Use specific routes, driver's stop location, rest stations, etc.

Trip Information Sheet

Transporters are encouraged to keep records of the biosecurity requirements for a transportation event in a Trip Information Sheet.

Transporters can use the same form to keep track of customers' biosecurity requirements like:

- wash instructions
- biosecurity protocols for entering, loading and unloading
- specific directions.

PLANNING AND PREPARING FOR THE TRANSPORTATION EVENT

Planning and Preparing

Various factors that will influence the preparation required for the transportation event include:

- health status of sites
- number of loading and unloading sites (chick delivery)
- driver's involvement in loading and unloading poultry
- customers requirements
- location for scrape-out
- route
- driver stops.

Multiple Loading or Unloading Sites

Usually, poultry transportation events include single loading and unloading sites. It can be from hatcheries to specific poultry farms; for example, turkey, chicken, lay fowl farms etc. or from farms to a slaughterhouse.

On a few occasions, the transporter may deliver day-old poultry to multiple farms in a single transport event:

- the risk of disease contamination and spread increases significantly with each loading and unloading event
- the drivers should be aware of risks and biosecurity best practices to mitigate the risks associated with multiple loading and unloading sites.

To prevent disease transmission from one flock to another, the transporters should travel from flocks of higher to flocks of lower health status.

Multi-Age Production Sites

To prevent disease transmission from one flock to another, the transporters should travel from flocks of higher to flocks of lower health status.

BIOSECURITY SUPPLIES

Biosecurity supplies are required to prevent or minimize exposure or contamination of the driver, equipment or transport unit during loading and unloading time.

The amount and type of biosecurity equipment required for a particular transportation event are dependent on the following:

- health status of loading and unloading sites
- the number of loading and unloading sites
- the amount of interaction that the driver will have with the poultry, equipment and staff at the loading and unloading sites.

The basic biosecurity kit at minimum should include:

- clean footwear designated for use only in the power unit
- rubber boots that can be cleaned and disinfected or disposable footwear for the transport unit or outside
- freshly laundered cloth or disposable coveralls
- gloves
- large disposable garbage bags to store used dirty clothing and other reusable items that need to be laundered and cleaned
- disinfectants and hand sanitizers
- paper towel
- water and wash bucket.

Equipment for Transportation Event

- Use designated equipment for loading and unloading
  - new or equipment that has been cleaned and disinfected
  - equipment for handling and transporting poultry, such as poultry gates and nets, crates, modules, curtains, hydraulic lift, dollies or a shovel, and brush for scraping out the trailer following the transportation event
  - usually, crates and modules are cleaned and disinfected at slaughterhouses after unloading poultry
  - avoid sharing your equipment with others
- Clean and disinfect all equipment after use
- Store clean equipment in a clean location on the transport unit
  - equipment can be kept in totes or plastic bags away from dirty equipment or areas
  - the crates and modules should be placed in covered areas to prevent contamination before loading them on trailers for the transport event.

Documentation Related to Biosecurity for a Transport Event

From a biosecurity perspective, the documentation requirements for a transportation event are:

Customers requirements

- Trip information sheet
- Transport unit wash report (cleaning and disinfection process).

Provincial or trade requirements

- Import/export certificates
- Health certificates.

Additional documents

- Transport unit travel history.

Electronic document exchange is preferred over hard copies from a biosecurity perspective.

Driver Preparation

Drivers can be a source of contamination, especially if they've come into contact with pets, farm animals, wildlife or contaminated equipment.

Drivers should:

- wash and wear freshly laundered clothing
- wear clean footwear
- avoid contact with any animals (including pets) or wildlife
- do not travel with your personal pets in the cab of the transport unit.

Key Learning Points

1. ***Transporters must implement biosecurity measures at all times;***
   - ***crucial role in preventing transmission of disease-causing organisms.***
2. ***Biosecurity protocols should be developed in consultation with specialists and may target specific disease or species or animal type.***
3. ***Identify the customer's biosecurity expectations early in the planning phase.***
4. ***A biosecurity kit and clean designated equipment should be used for each event.***

BETWEEN LOADS - PHASE 2

The between loads phase will focus on activities following unloading and prior to loading subsequent loads. It will allow you to be prepared to mitigate biosecurity risks associated with the next transportation event. In addition, you will learn about the cleaning and disinfection process.

Cleaning and Disinfection

The **cleaning and disinfection** process is one of the most critical parts of this training. The objective is to **prevent the spread of disease** agents between transport events. It's understood that in most situations, the drivers do not clean and disinfect their transport units.

However, this section aims to provide a **basic understanding** of the principles and practices for cleaning and disinfection to allow transporters/drivers to make **informed decisions.**

Transporters make decisions about cleaning and disinfection, such as:

- frequency and level of cleaning and disinfection
- choosing a wash station
- storage of transport units following cleaning and disinfection
- cleaning and disinfection records are to be kept.

It is important to understand that not all the protocols and best practices may apply to all transportation events. In addition, the protocols and best practices are not directly transferrable between the transportation of different poultry types.

A basic understanding of the cleaning and disinfection principles will allow transporters to adjust to slight changes in day-to-day operations.

Cleaning and Disinfection Process - What is the objective of cleaning and disinfection process?

To reduce the microbial load to prevent transmission of pathogens and spread of disease between transport events.

The cleaning and disinfection process is divided into two stages:

1. removal of organic matter
2. inactivation of pathogens.

Cleaning and Disinfection Process: Steps

Removal of organic matter and Reduction of the pathogen load up to 80%

Scrape out

- dry phase of cleaning
- removal of organic matter like bedding, manure and litter

Pre-washing rinse

- wet phase of cleaning

Flush out of organic matter that remains after scraping out

- *washing* – Application of detergent/degreaser to remove remaining organic matter and biofilms
- *post-wash rinse* - flush out residual detergent/degreaser and organic matter.

Inactivation of pathogens - Reduction of the pathogen load up to 99%

- **Disinfection** – application of chemical disinfectants
- **Drying**
- **Thermal inactivation** (baking)

Cleaning and Disinfection Protocols

Protocols may not need to include all of the cleaning and disinfection steps.

What should cleaning and disinfection protocols reflect?

Disease Risk

- The level of disease risk varies considerably based on several factors. It determines the cleaning and disinfection steps required, the selection of effective and compatible detergents and disinfectants, and the frequency of cleaning and disinfection.

Customers' Biosecurity Requirements

- Type of material being cleaned and disinfected
  - rubber vs. plastic and metal.

Condition of the Transport Unit

- Older or damaged units may need more careful cleaning for cracks, crevices and damaged parts.

Available Infrastructure

- The infrastructure needed to achieve the desired level of cleaning and disinfection.

The degree of organic matter in climatic conditions will influence the cleaning and disinfection protocol.

Characteristics of Selected Disinfectants

By having a general understanding of cleaning and disinfection, the transporter can modify protocols to address differences in risk with different transportation events by:

- changing the detergent or disinfectant used
- combination of cleaning and disinfection steps used
- the frequency of cleaning and disinfection.

This table shows various disinfectants' characteristics, advantages, disadvantages, and effectiveness against different microbes, such as bacteria, viruses, spores, fungi, etc.

These resources are valuable tools for deciding the detergents and disinfectants to use for cleaning and disinfection protocols.

Characteristics of Selected Disinfectants

For More Information, see the 'Disinfection 101' document at www.cfsph.iastate.edu

Disinfectant Category	Alcohols	Aldehydes	Biguanides	Halogens: Hypochlorites	Halogens: Iodine Compounds	Oxidizing Agents	Phenols	Quaternary Ammonium Compounds (QAC)
Sample Trade Names	Ethyl alcohol Isopropyl alcohol	Formaldehyde Glutaraldehyde	Chlorhexidine Nolvasan® Virosan®	Bleach	Betadyne® Providone®	Hydrogen peroxide Peracetic acid Virkon S® Oxy-Sept 333®	One-Stroke Environ® Pheno-Tek II® Tek-Trol®	Roccal® DiQuat® D-256®
Mechanism of Action	•Precipitates proteins •Denatures lipids	•Denatures proteins •Alkylates nucleic acids	•Alters membrane permeability	•Denatures proteins	•Denatures proteins	•Denature proteins and lipids	• Denatures proteins • Alters cell wall permeability	• Denatures proteins • Binds phospholipids of cell membrane
Advantages	•Fast acting •Leaves no residue	•Broad spectrum	•Broad spectrum	•Broad spectrum •Short contact time •Inexpensive	•Stable in storage •Relatively safe	•Broad spectrum	• Good efficacy with organic material • Non-corrosive • Stable in storage	• Stable in storage • Non-irritating to skin • Effective at high temperatures and high pH (9-10)
Disadvantages	•Rapid evaporation •Flammable	•Carcinogenic •Mucous membranes and tissue irritation •Only use in well ventilated areas	•Only functions in limited pH range (5–7) •Toxic to fish (environmental concern)	•Inactivated by sunlight •Requires frequent application •Corrodes metals •Mucous membrane and tissue irritation	•Inactivated by QACs •Requires frequent application •Corrosive •Stains clothes and treated surfaces	•Damaging to some metals	• Can cause skin and eye irritation	
Precautions	Flammable	Carcinogenic		Never mix with acids; toxic chlorine gas will be released			May be toxic to animals, especially cats and pigs	
Vegetative Bacteria	Effective	Effective	Effective	Effective	Effective	Effective	Effective	YES—Gram Positive Limited—Gram Negative
Mycobacteria	Effective	Effective	Variable	Effective	Limited	Effective	Variable	Variable
Enveloped Viruses	Effective	Effective	Limited	Effective	Effective	Effective	Effective	Variable
Non-enveloped Viruses	Variable	Effective	Limited	Effective	Limited	Effective	Variable	Not Effective
Spores	Not Effective	Effective	Not Effective	Variable	Limited	Variable	Not Effective	Not Effective
Fungi	Effective	Effective	Limited	Effective	Effective	Variable	Variable	Variable
Efficacy with Organic Matter	Reduced	Reduced	?	Rapidly reduced	Rapidly reduced	Variable	Effective	Inactivated
Efficacy with Hard Water	?	Reduced	?	Effective	?	?	Effective	Inactivated
Efficacy with Soap/ Detergents	?	Reduced	Inactivated	Inactivated	Effective	?	Effective	Inactivated

? Information not found

Disclaimer: The use of trade names does not in any way signify endorsement of a particular product. For additional product names, please consult the most recent Compendium of Veterinary Products.

References: Linton AH, Hugo WB, Russel AD. Disinfection in Veterinary and Farm Practice. 1987. Blackwell Scientific Publications; Oxford, England; Quinn PJ, Markey BK. Disinfection and Disease Prevention in Veterinary Medicine, In: Block SS, ed., Disinfection, Sterilization and Preservation. 5th edition. 2001. Lippincott, Williams and Wilkins: Philadelphia.

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Cleaning and Disinfection Protocols

SCRAPE OUT

What is the Objective?

- Remove loose organic matter (primarily bedding, manure, litter, etc.) from the transport unit.

Why is it Important?

- Reduces the pathogen load.
- Easier to remove organic matter that is stuck to the surfaces when loose material has been removed first.
- Reduces potential contamination of the other clean surfaces and wash station during pre-wash rinse and washing steps.
- Some commercial truck wash stations will not allow vehicles carrying livestock or poultry waste into their facilities.

Best Practices

- Avoid driving through the potential source of contamination at the scrape-out site.
- Scrape out as soon as possible following unloading.
- Remove all accessories and knock off all manure and bedding waste before scraping out.
- Follow a systematic process (top to bottom, front to back) to ensure that you don't miss any areas and minimize the reintroduction of loose organic material.

PRE-WASH RINSE

What is the Objective?

- Flush out remaining smaller loose organic matter after scrape-out.

Why is it Important?

- Reduces the pathogen load.
- Improve the effectiveness of the detergent or degreaser applied during the wash step.

Best Practices

- Use clean, warm water.
- Keep the transport unit on a slight incline to allow water and organic matter to flow out of the back.
- Use high volume, low-pressure hose.
- Rinse in a systematic order to prevent the re-introduction of organic material
  - exterior to the interior
  - top to the bottom
  - front to the back.

WASHING

What is the Objective?

- Remove remaining organic material and biofilms until all organic matter has been completely removed from all surfaces.

Why is it Important?

- Reduces the pathogen load.
- Use of a detergent or degreaser and brush helps remove organic matter and disrupt any biofilms present in the transport unit.

Best Practices

- Follow the manufacturer's instructions for detergent or degreaser.
- Cover all surfaces and allow it to soak.
- Systematically apply detergent or degreaser on a slopped surface
  - exterior to the interior
  - bottom to top
  - front to the back.
- Use low to medium water pressure and/or a brush to loosen any stuck organic material.
- Repeat until all organic matter has been completely removed from all surfaces.
- Wash all items that can be removed from the transport unit separately.
- Wash the undercarriage, wheels and wheel wells to remove organic material.

POST-WASH RINSE

What is the Objective?

- Flush out any leftover detergent or disinfectant and organic matter following the washing step.

Why is it Important?

- The presence of a biofilm, organic matter, and the detergent or degreaser can impede the effectiveness of the disinfectant.

Best Practices

- Use clean, warm water.
- Keep the transport unit on a slight incline to allow water and organic matter to flow out of the back.
- Use high-volume, low-pressure hose.
- Rinse in a systematic order to prevent the re-introduction of organic material.;
  - exterior to the interior
  - top to the bottom
  - front to the back.
- After cleaning, all crates, modules, curtains and other equipment are rinsed with water. It can be done with a hose or automatically with high-pressure nozzles.

INSPECTION

What is the Objective?

- Examine all surfaces of the transport unit to ensure that they are free of organic matter.

Why is it Important?

- Verify the effectiveness of cleaning and washing steps.
- Presence of organic matter can impede the effectiveness of the disinfectant.
- Decide if to repeat all or some of the cleaning and washing steps.

Best Practices

- Wear clean clothes & footwear during the inspection
- Ensure there is no pooling of water in the trailer
  - pooled water will reduce the effectiveness of the disinfectant.
- Ensure the trailer is well-lit & use a spotlight for low-light areas.
- Move gates or doors so that all areas are visible.
- INSPECT ALL ITEMS WASHED SEPARATELY.

If, on inspection, you see organic waste such as blood, feces, feathers, dander and other organic matter on the crates or trailer as seen in the figures, then it is unacceptable cleaning and washing.

Close attention should be paid to all the parts of the trailer and equipment before you proceed to the disinfection step. For some infections, even a small amount of infectious agent hidden in cracks, crevices and hard to reach areas can be a source for the spread of disease.

DISINFECTION

What is the Objective?

- Inactivate pathogens of concern from all surfaces of the transport unit.

Why is it Important?

- Reduces the pathogen load
  - even if visibly clean, viable pathogens can still be present and infect animals.

Best Practices

- Follow the manufacturer's instructions (concentration, contact time, water temperature).
- Ensure the surfaces are clean, free of pooled water and dry.
- Cover all surfaces.
- Apply the disinfectant in a systematic fashion from bottom to top on vertical or slopped surfaces.
- Keep the disinfectant wet for the required contact time.
- Dry conditions.
- Don't let the disinfectant get dry before recommended contact time
  - repeat the application of disinfectants until the contact time has been achieved.
- Cold weather conditions
  - disinfection should be performed in an enclosed and heated location
  - if not possible, then compatible antifreeze agent should be used.
- Disinfect all items that were removed from the transport unit separately.;
  - apply another layer of disinfectant to the exterior of the trailer after reassembly
  - while reassembling, be careful not to re-contaminate the trailer trough unclean footwear and clothing.
- Disinfect the undercarriage, wheels and wheel wells.

DRYING

What is the Objective?

- Remove all moisture from the transport unit.

Why is it Important?

- Reduces the pathogen load.
- Inactivates pathogens that are susceptible to desiccation that may be situated in hard-to-reach areas (e.g., cracks, joints and pitted metal) and can replicate in warm and moist environments.

Best Practices

- Incline the transport unit at a slight angle (≈ 2%)
  - in wet and cool weather, use heat treatment in drying bays.
- Dry in a clean area away from contaminated transport units, equipment and staff.
- The drying bay should have restricted access.

SCRAPE-OUT LOCATIONS

Scrape-out should be done:

- at the destination site
- designated scrape-out sites away from the destination site.

Scrape-out locations are a potential source of infection because they are locations where drivers dispose of potentially infectious material from a variety of locations and for various species.

Follow biosecurity best practices for entry and exit to the transport unit and trailer to prevent cross-contamination of the driver, power unit and trailer.

Washing

Biofilm, organic matter or detergent/degreaser can impede the effectiveness of the disinfectant to be used.

Therefore the detergent or degreaser along with the organic matter and biofilm should be rinsed off with clean water.

Inspection

Pay attention to the hard-to-reach places that can easily be missed during the cleaning step:

- Hinges
- Areas behind or under doors
- Chains
- Cracks
- Crevices

It's useful to use a checklist that's specific to the type of trailer being cleaned to ensure that no areas are missed.

The checklist should also include an inspection of the power unit.

Is this trailer ready for disinfection (picture on the right)?

No, this trailer is not ready for disinfection.

The trailer should be completely free of all organic matter before applying disinfectant.

What would you do next?

If a small amount of organic matter is present only in the back part of the trailer, then perform cleaning and washing of the back part of the trailer, including physical removal of the organic matter, pre-wash rinse, and application of the organic matter detergent or degreaser and post-wash rinse.

If small specs of organic matter or feces are present throughout the trailer's surface, then perform cleaning and washing of the entire trailer, including physical removal of the organic matter, followed by pre-wash rinse, application of detergent/degreaser and post-wash rinse.

Disinfection

These best practices are there to ensure the best effectiveness of the disinfection.

Cover all surfaces of the trailer (chick delivery truck) with disinfectant solution.

Disinfection – Choosing a Disinfectant

What to consider when selecting a disinfectant:

- effective against pathogens of concern
- cost and corrosiveness of long-term repeated use
- personal protective equipment is required to use the disinfectant
- outside temperature
- effective on the surface materials present
- safety for humans, animals and the environment
- management of effluent from the disinfection step
- application type.

When making decisions about which disinfectants to be used, it is recommended that you refer to specialists, such as veterinarians, provincial governments agriculture extension specialists, detergent and disinfectant product representatives, and academia and poultry industry associations.

Cleaning and Disinfection of the Power Unit

Cleaning and disinfection principles apply to the power unit as well.

- Clean and disinfect things that can be removed from the power unit separately (e.g. seat covers, rugs, floor mats, etc)
- Disinfect using a disinfectant spray or wipes
- Remove organic matter (vacuum and wipe).

Pets should never be allowed into the power unit as they can be a source of infection or cross-contamination.

Choosing a Wash Station

Individual transporters or transport companies may have to decide to select a wash station for cleaning and disinfecting trailers. However, few transport companies already get their trailers washed in a specific washing station or in the slaughterhouses where they unload poultry.

It is recognized that biosecurity infrastructure, wash station capacity and cleaning and disinfection protocols vary among wash stations. Therefore, it is very important to select a washing station that meets your needs carefully.

It is recommended to incorporate biosecurity criteria, including customer biosecurity requirements, when selecting a wash station to ensure that it can achieve the required level of cleaning and disinfection of the transport unit and associated equipment.

The following general criteria should be considered for choosing a wash station for cleaning and disinfection:

- access pathways
- site organization
- washing areas
- water used
- effluent collection systems
- use of personal protective equipment (PPE).

Access Road

- Separate lanes or roads for dirty and clean transport units.
- Lanes or roads are free of manure and other organic matter.
- Lanes or roads are graded and made of material that allows drainage.

Site Organization

- Physical and functional separation between clean and dirty areas
  - avoid cross-contamination.
- Scrape-out locations are completely separated from the wash site.

Washing Area

- Designed to prevent wash water from contaminating other areas and equipment.
- Floor, walls, and curtains are made of material that can be cleaned and disinfected.
- Wash bays are cleaned and disinfected between transport unit washes.
- Wash area is a drive-through.

Water

- Quality and quantity of water that does not contribute to the level of contamination or pathogen load
  - recycled water is treated appropriately before use (pH, degree of hardness of water, etc.).
- Capacity to achieve the manufacturers recommended water temperature for the detergent and disinfectants.

Effluent Collection System

- Enough capacity to prevent backup of dirty water.
- Store effluent in a biosecure manner.
- Organic waste and wash water are managed as per local or federal legislation and regulations.

PPE

- Staff use appropriate Personal Protective Equipment (PPE) to prevent the introduction of contamination or re-contamination after disinfection step
  - footwear, body waterproof outer wear, masks and respirators, hearing protection, eye protection, hard hat, gloves.
- Follow manufacturers' recommendations for PPE.

Storage of Clean Transport Units

What is the objective? To keep transport units clean prior to loading.

Best Biosecurity Practices

- Physically and functionally separate from the areas that contain transport units that have not been cleaned or disinfected.
- Away from pets, farm animals, rodents and wildlife.
- Away from people, contaminated equipment, feed and bedding.
- Away from exhaust fans and dusty areas.

Key Learning Points

- Cleaning and disinfection after each transportation event are critical to prevent spread of disease agents
- Cleaning and disinfection process includes removal of organic matter and inactivation of pathogens.
  - Cleaning and disinfection steps
    - scrape-out
    - pre-wash rinse
    - washing (application of detergent)
    - post-wash rinse
    - inspection
    - disinfection
    - drying
    - baking, if necessary.
  - Cleaning and disinfection protocols may not include all the cleaning and disinfection steps depending on various factors for e.g., disease risk, customers biosecurity requirements, surface material and available infrastructure, etc.
- The transport unit should be free of organic matter before applying disinfectant:
  - use an effective and compatible combination of detergents and disinfectant
  - use recommended water temperature, concentration and contact time as per manufacturer's recommendations.
- Clean and disinfect all accessories, separated parts, equipment and the power unit.
- Choose a wash station that incorporates biosecurity measures during cleaning and disinfection process.

LOADING, ON THE ROAD AND UNLOADING PHASES

The lesson is divided into 3 sections: the loading, on-the-road, and unloading phases. Many biosecurity practices for the loading phase also apply to the unloading phase.

LOADING PHASE

1. Accessing the Site

What is the Objective?

- Minimize the risk of contamination of the exterior of the trailer.

Best Practices

- Pay attention to the signage
- Directions for where to park
- Sign visitors log
- Recommended that the drivers follow any cleaning and disinfection protocols specific to the premises, such as: cleaning and disinfection of wheels and wheel wells on arrival and departure
- Avoid lanes and roads contaminated by manure or organic matter
- Drive slowly
- Avoid driving close to barns with live animals
- Park in the area designated for loading, avoid parking by barn or building exhaust fans and air inlets (if possible).

2. Entering and Exiting the Power Unit

What is the Objective?

- Prevent contamination of the interior of the power unit.

Best Practices

- Wear clean clothes
- Dedicated footwear for the power unit
- Keep separate footwear or boot covers (disposable or reusable) for exiting the power unit
- Wash your hands or sanitize prior to entering the power unit or touching anything in the power unit.

3. Preparing the Trailer for Loading

What is the Objective?

- Minimize the risk of contamination to the interior of the trailer.

Best Practices

- Do not allow potentially contaminated premises or facility staff to enter the trailer
- Do not come into contact with animals that are not involved in the transport event
- Ensure the back end of the trailer that meets the ramp is clean and free of visible contaminants such as manure, etc.
- The chute and loading ramp is clean and free of visible debris or manure
- Use your own equipment rather than use equipment from the premises.

4. Entering the Trailer (Day Old Poultry Delivery)

What is the Objective?

- Prevent contamination of the interior of the trailer.

Best Practices

- Use biosecurity supplies (biosecurity kit)
- Wear a clean outer layer of clothing (coveralls, hat, boots and gloves)
- If not wearing gloves, clean and sanitize hands prior to entering the trailer and handling animals for loading
- Use only dedicated loading equipment inside the trailer.

5. Preparing the Trailer for Loading

What is the Objective?

- Minimize the risk of contamination to the crates, modules and trailer.

Best Practices

- Do not allow potentially contaminated premises or facility staff to enter the trailer
- Do not come into contact with poultry that is not involved in the transport event
- Open the curtains of the trailer for loading poultry (slaughter)
- Ensure that the forklift for unloading empty crates is clean
- Place crates/dollies in a clean area for loading poultry Use only dedicated loading equipment inside the trailer.

6. Assisting with Loading

What is the Objective?

- Minimize the risk of contamination to the crates, modules and trailer

Best Practices

- Follow onsite biosecurity protocols, including complying with restricted access on entry
- If assisting in catching and loading poultry, then wear clean coveralls, gloves, and footwear
- If only observing loading process, then wear dedicated footwear and gloves
- Avoid contact with the poultry that are not being moved
- Use only dedicated cleaned and disinfected equipment for catching and loading
- For multiple unloading sites, the day-old poultry to be unloaded first should be placed inside the truck last.

7. Exiting the Trailer and Re-entering the Power Unit after Handling Animals

What is the Objective?

- Prevent contamination of the interior of the power unit.

Best Practices

- Remove the outer layer of clothing, boot covers, and gloves
  - if disposable, dispose of them onsite
  - if reusable, contain them in a sealable container prior to loading them into a compartment of the transport unit
- Wash your hands or sanitize prior to entering the power unit or touching anything in the power unit
- Sanitize all contact points within the power unit once you've entered.

Loading Phase - Accessing the Site

Accumulation of mud, organic matter and dirt on the tires and underneath the trailer can harbour pathogens or pests that are carried with the transport unit to other locations or premises and spread disease.

Loading Phase - Entering and Exiting the Power Unit

Example of a protocol for entering and exiting the power unit.

Prior to Leaving the Power Unit	Prior to Entering the Power Unit
• Remove power unit designated footwear • Open the door and swing your feet out of the truck • Put on footwear designated for activities outside of the power unit • Step out of the power unit.	• Remove footwear as you are stepping into the power unit • Place footwear into a sealed container • Use hand sanitizer prior to touching anything inside the power unit (door handle, steering wheel, stick shift, etc.) • Put on power unit designated footwear.

Protocol may differ based on your own requirements, but it should still establish separation of clean from dirty areas.

Loading Phase - Entering the Trailer

Example of a protocol for entering the trailer.

1. Retrieve the biosecurity kit from a clean location (for example; from a storage cubby or plastic storage box) and place it outside the access door to the trailer.

2. Open the biosecurity kit and place the lid topside down in a clean area. Remove shoes while stepping onto the biosecurity kit lid.

3. While ensuring that the contents of the biosecurity kit do not touch the ground, put on clean coveralls, a pair of clean boots and disposable gloves.

4. Step out of the biosecurity kit box and directly into the trailer.

Click the link to find additional example protocols and videos for entering the trailer. Protocols Ex.

ON THE ROAD PHASE

The 'on the road' phase is divided into sections: selecting a route and stops such as border crossings, restaurants, gas stations and weigh stations, etc.

Selecting a route is critical and can help prevent disease spread between premises. The route and stops should be selected before the beginning of the transportation event. In addition, the farm pick-up or delivery sequence should consider the disease transmission risk.

Stops include border crossings, restaurants, gas stations, and weigh stations. Stops can be a source of contamination for the driver, transport unit and poultry in the shipment.

Selecting a Route

What is the Objective?

- Prevent the spread of diseases between premises.

Best Practices

The route and stops should be selected before the beginning of the transportation event. Things to consider when selecting a route:

- the sequence of pick up or delivery should assess the risk of disease transmission
- travel from flocks of higher to lower health status
- travel first to the premises holding younger poultry and then to the mature or older poultry
- avoid agriculturally dense areas and areas where the disease has been identified
- follow updates provided by the CFIA, USDA or provincial governments
- the route should be planned so that transporters first visit the premises that hold young poultry, followed by mature or older poultry. This is because the day-old poultry or younger birds are less immunocompetent and are more likely to become sick if exposed to pathogens.

Stops

What is the Objective?

- Prevent contamination of the shipped poultry, drivers and transport units.

Best Practices

- Park as far away as possible from other animal transport units
- Discourage people from touching the poultry in shipment or your transport unit
- Follow biosecurity best practices when entering and exiting the power unit.

UNLOADING PHASE - Scrape-out at Destination

The driver is responsible for the animals until they are unloaded at the destination.

The biosecurity best practices discussed in the loading phase also apply to the unloading phase.

The unloading phase includes 2 extra activities:

- scrape-out at destination
- cleaning and disinfection of poultry transport containers (crates and modules).

Cleaning and disinfection of crates and modules after unloading poultry are usually done at the slaughterhouses. In some slaughterhouses, cleaning and disinfection of trailers are also done within the facilities. The transporters should ensure the slaughterhouse cleaning and disinfection process meets their requirement.

It is preferable to scrape out at the destination site:

- designated scrape-out locations can serve as a potential contamination point if adequate biosecurity measures are not taken
- eliminates the need for the driver to go to an additional location just to scrape-out.

The perception that biosecurity requirements are unnecessary for animals transported to a final life cycle destination, such as a slaughter establishment, is short-sighted.

The risk of transmitting pathogens at slaughter establishments is equivalent to the risk at other sites or even more significant.

Potential Contamination

The slaughter establishment facility, staff and equipment are a potential source of contamination for transport units, drivers and equipment that will be used to move healthy animals.

Crate Cleaning

For poultry slaughter establishments, the crates and modules are usually cleaned and disinfected after the unloading of birds.

The transporters should ensure that crates and modules are cleaned and disinfected before they are loaded onto their trailers.

Follow biosecurity best practices for loading and unloading at slaughter establishments or follow site-specific biosecurity protocols if available.

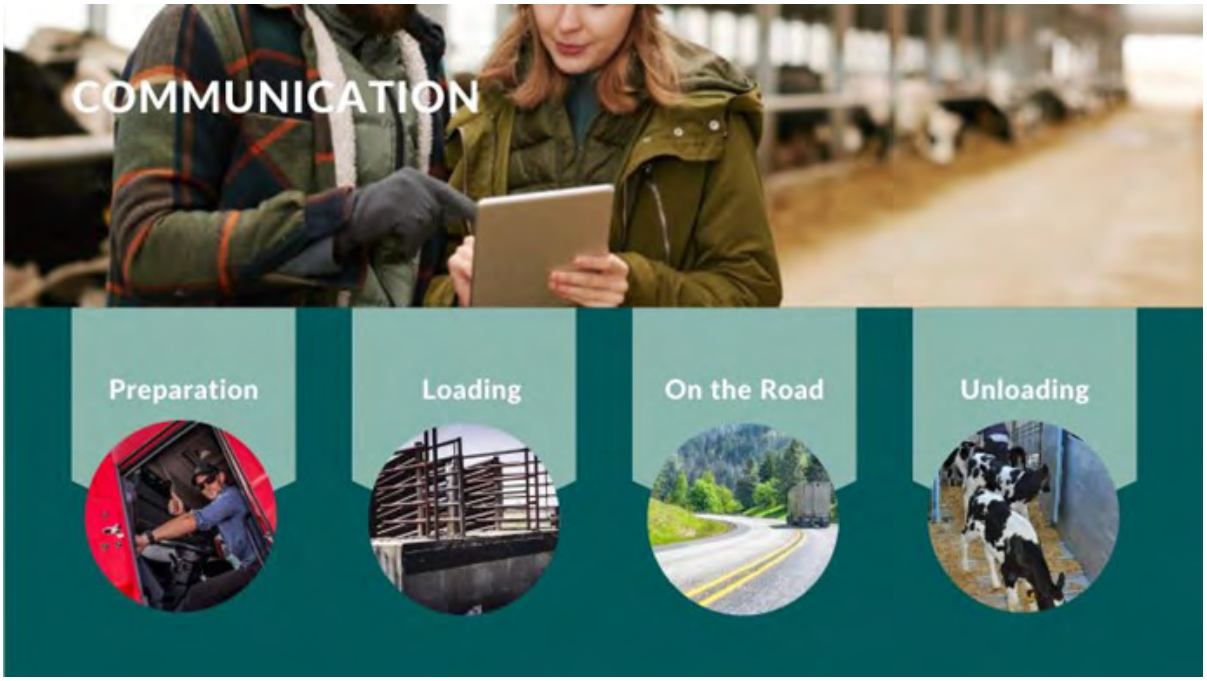
Key Learning Points

1. ***Follow customers' biosecurity protocols and posted instructions and/or signs when accessing the origin and destination site.***
2. ***Follow biosecurity measures to prevent contamination of the power unit, trailer and/or the premises during loading and unloading phases.***
3. ***When the driver participates in loading, wear clean clothes and footwear, and respect the separation zones (clean vs dirty areas).***
4. ***Select routes and identify stops before beginning transportation event***
   - ***follow biosecurity measures to prevent contamination of poultry, transport unit, equipment and drivers at stops.***
5. ***Slaughter facilities have the potential to be a source of contamination for transport units, drivers and equipment.***

6 THE TRANSPORTATION PROCESS

COMMUNICATION

In this last module, we will complete the training with an overview of the transport process, where we will apply and consider all the learnings you have acquired since the beginning of this course. We will also provide pertinent insights and tips for livestock transport for each step.



The transport process may be summarized as above.

The previous modules apply at every stage of the transport process.

We will address it orderly, using CFIA's checklist for animal transport.

1. Knowledge about humane transport of animals
2. Knowledge of the species
3. Knowledge of animal handling
4. Contingency plan
5. Clean equipment/biosecurity
6. Animals assessed prior to transport
7. Assess if special handling is required
8. Factors that affect transport
9. Animal monitoring during transport
10. Records

Effective communication is essential for optimal planning and managing relationships with colleagues, clients and stakeholders. Conversely, poor communication can ruin planning and execution efforts and relationships and potentially result in adverse humane animal transport outcomes, lost contracts and a damaged reputation.

To begin, we will address the most important common denominator for successful livestock transport: communication. **Communication** is key for normal transport activities but more critical in times of transport issues or biosecurity crises.

COMMUNICATION PROCESS

Drivers must communicate with a wide variety of people during their drive.

The following communication process is commonly used.

Before getting to the farm
Communicate to the farmer, catching crew and processor if there are changes or delays to the schedule.

At Loading Site

1. Make contact with the producer (or the employee) and the loading crew leader upon arrival at the farm
   - present yourself in a professional manner.
2. Ask for instructions
   - special considerations, biosecurity procedures or facility policies.
3. Confirm the directive back to the producer (or employee)
   - establish the loading plans and delegate responsibilities
   - if there are changes to the vehicle(s) or equipment that are different from those planned, the transporter should notify the farmer and the catching crew to determine if the vehicle(s) or equipment can be accommodated.
4. Request confirmation that only 'fit for transport' birds will be selected
   - confirm the number of birds being loaded.
5. Upon completion of the directive advise the producer (or the employee) and ask if there are other instructions before you leave
   - confirm any delivery instructions including expected feed-water-rest withdrawal times and times of arrival.
6. In the event of a disagreement with the client, especially in regard to animal fitness, the driver is advised to contact dispatch, their supervisor or the plant for assistance.

While on the Road

Be ready to communicate with dispatch, shipper or receiver to share information or seek guidance. This means you should have all contact numbers handy.

At Unloading Site

1. Confirm with receiving where the trailer has to be parked and if there are any special instructions including biosecurity and trailer management (tarps, external ventilators, etc.). *The policies of the receiver being delivered to must be respected at all times.*
2. Once the trailer has been released from the hauling truck, ensure the trailers are securely stationed at their dedicated station. Inspect for any ill or injured birds and if any compromised birds are found and inform receiving management and request further inspection and/or care of the load.
3. Before departure the driver should
   - confirm the count
   - turn in all necessary paperwork, including the Flock Information Sheet
   - contact the owner of the load if necessary
   - make note of any incidents that may have occurred during unloading and file a report if necessary
   - notify management of any broken equipment or repairs that need to be made to the facilities.

Be effective in your communications by applying the seven C's of communication: be clear, correct, complete, concrete, concise, considered and courteous.

Be professional: The way you act is also part of communication!

CHECKLIST ITEM #1: KNOWLEDGE ABOUT THE HUMANE TRANSPORT OF ANIMALS

1. ***All persons involved in transport of animals share responsibility under the law (knowledge included).***
2. ***Be knowledgeable and competent – Know your stuff!***
3. ***Regs and good practices apply ALL THE TIME.***
4. ***Never stop caring for the animal under your responsibility.***
5. ***Act as if you were under the camera during the entire process.***

Preparation	Loading	On the Road	Unloading
• Not all facilities will provide optimal handling and loading conditions, be prepared to adapt and apply good practices based on the situation and the animals presented to you • Gather information prior to your arrival to come fully prepared • An ounce of prevention is worth a pound of cure, including having a well-documented contingency plan.	• Know what is right and do it • Drivers have the last say on animal fitness.	• Know your rights and obligations related to your load of birds • Monitor your birds, watch for specific risk factors while on the road, and adapt accordingly.	• Not all facilities will provide optimal handling and unloading conditions, be prepared to adapt and apply good practices based on the situation and the animals presented to you • Gather information prior to your arrival to come fully prepared • One ounce of prevention is worth a pound of cure • The receiver must be ready and able to take care of the birds before you start unloading.

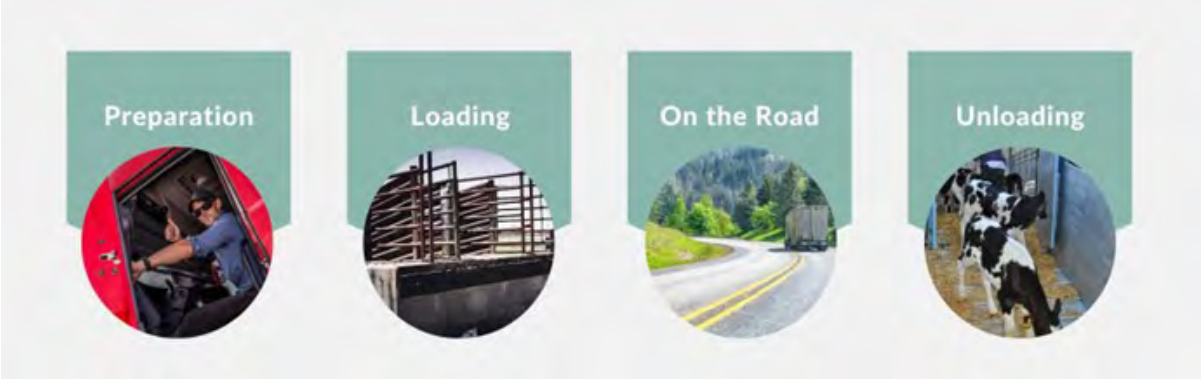
CHECKLIST ITEM #2: KNOWLEDGE OF THE SPECIES

1. ***Remember that although most livestock are predictive, it might not always be the case. Be ready to adapt.***
2. ***On a regular basis and when preparing for a new species to transport, take the time to review their behaviour and handling characteristics***
3. ***Know their limits and their weaknesses in order to provide the best conditions throughout the process.***
4. ***Master their fitness for transport characteristics and make no compromise on following the regulations.***

Preparation	Loading	On the Road	Unloading
• Review species characteristics • Assess if you have everything at hand to be successful at the task • Know key needs such as footing, bedding, density and climate protection requirements.	• Use the proper flight zone • Use proper grouping/catching strategies • Use proper handing techniques • Protect the birds at all times, especially the most vulnerable.	• Know your signs of stress and cold • Read your load, and assess its comfort based on observations, not on assumptions and adapt accordingly.	• Use proper unloading technique • Protect the birds at all times, especially the most vulnerable.

Although all birds are more vulnerable than livestock, the following bird types are more vulnerable to handling and transporting stress and post-stress:

- day old chicks, poults and ducklings
- ready to lay pullets
- spent hens
- poorly feathered birds
- market size ducks raised for duck foie gras.



How Do We Transport Poultry?

Transport of Day-Old Chicks and Poults

Specialized Containers

Day-old chicks and poults are transported in climate-controlled trucks to farms in specialized cardboard or plastic boxes or trays.

These boxes or trays are stacked in the truck and provided with appropriate ventilation and temperature, which are actively monitored and adjusted from the hatchery to the barns.

Birds travel in these conveyances by truck and/or plane to domestic and international destinations.

Timeline

Day-old birds should be transported and placed within 72 hours of hatching. The nutrient reserve in the yolk of the newly hatched birds will provide the required nutrients for this period of time.

How Do We Transport Broiler Chicken and Turkeys in Canada?

Transporting

In Canada it is common to transport market weight meat poultry on flat deck trailers using a loose crate, fixed crate (liner) or modular system.

Fixed crate systems, also called 'liners,' have crates built as fixtures on the trailer, and are mostly used for turkey transport.

Transferring the Birds

Birds are either hand-caught and then carried to the transport unit (crate or module) or are herded onto a loader which extends from the barn to the trailer.

- Birds are caught, carried out of the barn and or herded to crates on the trailer. Once the crate lid is secured, the crates are stacked for transportation
- Modular systems consist of perforated drawers that are collectively held in a modular container constructed of metal framing. The modules are transferred from the trailer to the barn with a forklift and placed near the birds. Once the catching crew loads the module, the forklift returns it to the trailer.

How Do We Transport Pullets in Canada?

Pullet Dollies

Pullets are transported from the pullet barn to the lay barn or breeder house using pullet dollies or crates. These dollies are wire-framed, six to seven rows high, 18 inches wide, four feet long and on dolly wheels so they can be rolled off the truck and into the barn. These pullet carts will be locked into place two across and end-to-end to span eight feet.

Gaining Insight

Dolly transport trucks are usually flat decks with a solid roof and a lift gate. They have the ability to add paneling or curtains to the sides to accommodate weather conditions. The lift gate must be able to lift from the ground to the second story of a layer or breeder barn.

How Do We Transport Spent Hens (end of lay) in Canada?

Modular Systems

Depending upon the availability of processing, end-of-lay hens and breeders can be transported using crates, modular systems or hybrid pullet carts.

Moving the Crates

When using crates or modular systems, birds are often brought outside the barn and loaded. Hybrid pullet carts are a combination of a pullet dolly that has drawers instead of cages. This allows catchers to wheel the carts along cage rows while loading birds into the drawers. These carts can then be wheeled outside the barn onto the lift gate of a modified pullet trailer for transport to the processing plant.

The lift gate on this modified trailer must be able to lift from the ground to the second story of the barn.

How Do We Transport Ducks in Canada?

Modular Systems

For meat type ducks, large organizations mainly use modular system similar to those used for chicken. For ducks raised for foie gras and sent for slaughter, loose crates are used but these have a different height to accommodate these birds. They usually contain between 4 and 5 birds depending on their size.

CHECKLIST ITEM #3: KNOWLEDGE OF ANIMAL HANDLING

1. ***Take time to understand basic handling principles provided earlier.***
2. ***If you rush them because you are in a hurry, it will take more time. Stay calm, follow the animals' pace and be efficient (least amount of energy possible to get them moving).***
3. ***Compared to livestock handling, poultry handling is much more involving and requires that you touch and grab the animals. Use extra care and respect the birds' anatomy and limits when handling to avoid and minimize suffering.***

Preparation	Loading	On the Road	Unloading
• Knowledge is key • Practice makes perfect • Auto-evaluate yourself and learn from your past experience • Get help if uneasy with a species prior to engaging in their handling • Read your animal and its environment. Then, assess your needs for a safe catching and loading and make sure to have optimal conditions for the job.	• Adapt-adapt-adapt • Be quiet when catching • Minimize bird handling and transferring between catchers • Handling during catching and loading must be done with great care.	• No handling is required on the road.	• Adapt-adapt-adapt • Transport is physically and mentally tiring for animals. Take it into consideration when unloading • Handling during unloading should be done with great care.

CHECKLIST ITEM #4: CONTINGENCY PLAN

1. ***Every commercial carrier and those persons who transport animals in the course of business or for financial benefit must have a contingency plan. It's the law.***
   - ***The plan establishes measures to be taken to reduce or mitigate avoidable suffering, injury or death of animals during the transport process.***
2. ***Any person who is required to have a contingency plan will inform all employees and agents or mandataries who load, confine, transport or unload animals or who take part in decision-making, or advising the person operating the conveyance, in respect of the loading, confining, transporting or unloading of animals of the contingency plan.***

Preparation	Loading	On the Road	Unloading
• Make sure you have a well-documented plan; it's the law • Be knowledgeable about your plan • Try to make it a continuous improvement process and improve your plan from real-life experiences and solutions.	• Be ready to recognize the dangers you have assessed in your plan and execute the solutions accordingly • Communicate with your partners and document your decisions and the outcomes when you execute any item in your plan.	• Always carry a copy of your contingency plan in the cab • Be ready to recognize the dangers assessed in your plan and execute the solutions accordingly • Communicate with your partners and document your decisions and the outcomes when you execute any item in your plan.	• Be ready to recognize the dangers you have assessed in your plan and execute the solutions accordingly • Communicate with your partners and document your decisions and the outcomes when you execute any item in your plan.

CHECKLIST ITEM #5: CLEAN EQUIPMENT/BIOSECURITY

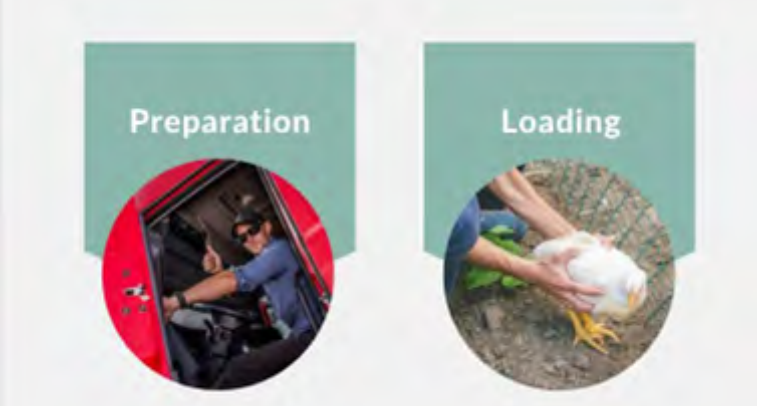
1. ***The basic concept of biosecurity is to prevent animals, equipment, transport unit or yourself from becoming contaminated with a disease agent, also called pathogen. In a situation where contamination occurs then the goal is to prevent its spread to animals, other locations and equipment.***
2. ***High risk of transmission of diseases due to significantly high number of movements.***
3. ***Every transportation event increases risk of transmission of diseases.***
4. ***Transport equipment (crates, modules, trailers) should be washed and disinfected after each use.***
5. ***Keep coveralls clean and wear boot covers where required.***

Preparation	Loading	On the Road	Unloading

• Proper truck and trailer cleaning will help stop the spread of disease
• The following will influence your preparation:
  • number of loading/ unloading sites
  • the health status of these sites
  • driver's involvement in loading/unloading animals
  • multiple loading and unloading sites mean carry more biosecurity supplies
  • customers' requirements and location for scrape-out
  • route and driver stops
• Check with the facility or manager at the point(s) of loading and unloading for any special biosecurity requirements.
	• Follow loading site biosecurity requirements
	• When no guidance is provided, use the best practices presented in the biosecurity module.
		• Do not ignore the contamination potential from and to your load along your transportation route: stop or park alongside barns, ventilators, and other trucks, or drive in known contaminated areas.	• Follow unloading site biosecurity requirements
			• When no guidance is provided, use the best practices presented in biosecurity module.

CHECKLIST ITEM #6: ANIMALS ASSESSED PRIOR TO TRANSPORT

1. ***All parties who are directly (handlers, producers, transporters) or indirectly (processors) involved in the transport process are to take measures to ensure that animals are assessed for fitness prior to transit.***
2. ***Applies to:***
   - ***all people who load, confine or transport an animal, or cause one to be loaded, confined, transported***
   - ***any conveyance or container (there are separate rules for animals transport on vessels but it will not be addressed in this course).***
3. ***Animals must not be transported unless they are fit to withstand the entire journey without suffering, injury or death that is caused by, or made worse by, the transport process.***
4. ***Unfit animals MUST NOT be loaded.***

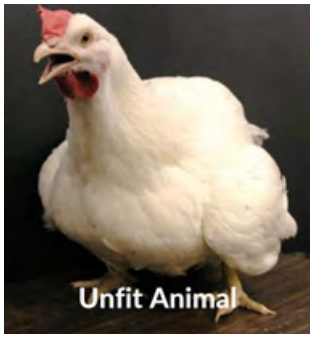


• Be knowledgeable and competent in recognizing signs of unfit and compromised animals • Use the available decision trees to be knowledgeable and competent on the best solutions to apply to any fitness situation • Ensure that the birds are healthy and conditioned before transportation • Identification of birds not fit for transport (visibly sick, injured, wet, or otherwise deemed unfit) should ideally occur before sorting and loading.	• Assess each animal to be loaded. As this is a shared responsibility, the outcomes of loading an unfit animal will backfire on all parties involved • Each situation is different. Knowledge and judgment are needed to evaluate if an animal is considered unfit • Document your decision.

The Health of Animals Regulations Part (HAR) XII has clearly defined, within the regulations, conditions considered unfit and conditions considered compromised.

These conditions were all covered in the Regulations and Codes of Practices section of this CLT training.

Unfit Animal



An unfit animal (as it relates to birds) is:

- a non-ambulatory animal
- has a fracture that impedes its mobility or causes it to exhibit signs of pain or suffering
- is lame in one or more limbs to the extent that it exhibits signs of pain or suffering and halted movements or a reluctance to walk
- it is lame to the extent that it cannot walk on all of its legs
- is in shock, or is dying
- has laboured breathing
- has a severe open wound or a severe laceration
- is extremely thin
- exhibits signs of dehydration
- exhibits signs of hypothermia or hyperthermia
- exhibits any other signs of infirmity, illness, injury or a condition indicating that it cannot be transported without suffering.

Requirements of the Code of Practice

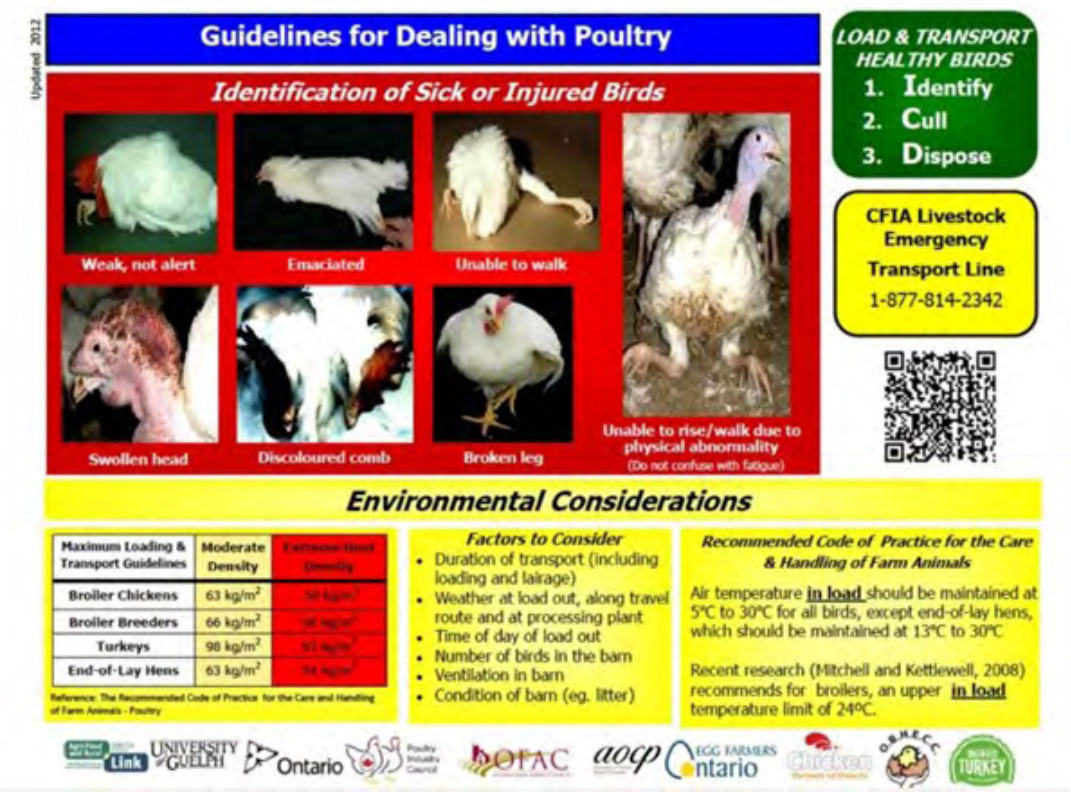
Evaluating the Flock

- Flock must be evaluated for fitness and those birds that are deemed unfit for transport must be euthanized, separated or transported with special provisions for veterinary assessment or treatment only.
- Wet birds must not be loaded in cold weather if there is a risk that birds will become chilled.
- The flock and environmental conditions, as well as the expected journey duration, must be taken into consideration when loading birds for transport.

Evaluating Needs

- The number of birds in each container must be determined prior to loading, taking into consideration the available container floor space, body size/weight, prevailing environmental conditions, and duration of transport.
- Pre-transport feed withdrawal must be managed to minimize the time that birds are off feed.
- Water must be available to the birds until catching commences.

The following image (handout from the Poultry Industry Council) shows some examples of sick or injured birds.



What should you do if you encounter sick or Injured birds?

- Follow company's unfit bird policy.
- Point out an unfit bird to your supervisor and ask them what to do with it.

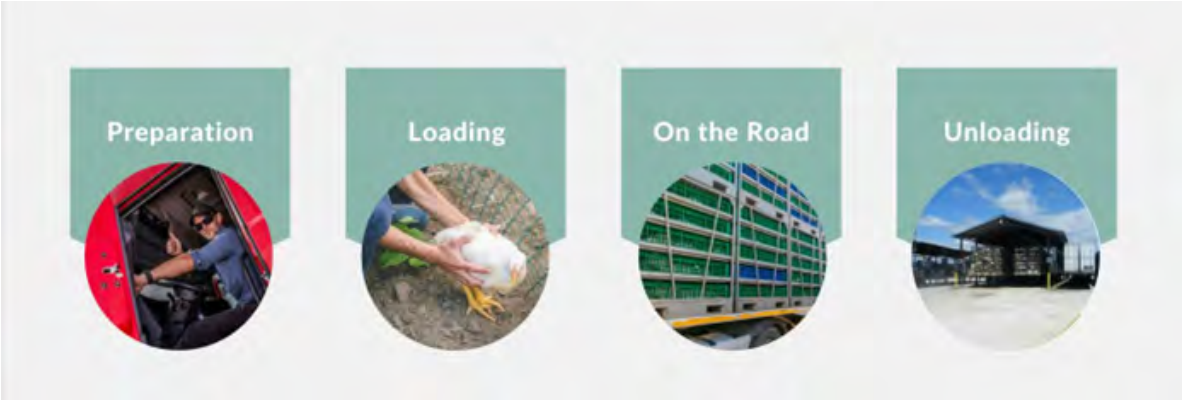
Animals Assessed Prior to Transport: Still Need Help? *If you are still determining if an animal is fit for the trip, contact your veterinarian or a transport specialist, or refer to the NFACC codes of practice.*

Resources	Type	Website	Downloadable
Regulatory guidance and resources for the humane transport of animals	Documents	link	Some available
Transporting unfit or compromised animals (**signs of unfit and compromised animals**)	Document	link	PDF
Checking animals before transport	Decision tree	link	Image
Livestock & Poultry Transport in Canada: Are you sure that animal is fit for the trip?	Document	link	PDF
Canadian Livestock Transport Manual, *Module 2 (Regs and codes)*	Document		Available
National Farm Animal Care Council (**NFACC**) species specific **Codes of Practice**	Document	link	Available
Assessing **lameness** for transport	Decision tree	link	PDF
Decision Tree Handbook by Poultry Industry Council	Decision tree	link	PDF
Poultry Handling and Transportation Manual by Poultry Service Association	Document	link	PDF
Contact a Canadian Food Inspection Agency office	Contact	link	n/a

Note: This information is provided for information purposes. In the event of any discrepancy between our material and the *Health of Animals Regulations, the Health of Animals Regulations* shall prevail.

CHECKLIST ITEM #7: ASSESS IF SPECIAL HANDLING IS REQUIRED

1. ***Assess birds prior to transport to identify animals that show signs of being affected with a disease or condition that could prevent their transport or make special handling for welfare reasons necessary.***
2. ***Special handling might also be necessary at destination based on the needs of the birds (from conditions assessed at loading or due to changes in their conditions during transport).***



Preparation	Loading	On the Road	Unloading
• It is important that you get information about animals with special needs prior to your arrival at the loading site • You might have to bring extra material or decide to address their comfort (extra tarping or wind block panels between crates stacks, extra space, assistance from a vet, or else) • Compromised animals allowed to be transported may require more time handled and have a reduced transport time (max 12 hrs FWR interval) • Young, culled or more fragile birds often require special handling too.	• Handle birds with special handling needs with great care • Document your preparation, your actions, and the outcomes of their loading.	• Special handling needs mean more susceptibility during transport. Therefore, monitor more frequently and adapt.	• Handle birds with special handling needs with great care • Document your transport monitoring, your actions, and the outcomes of their unloading • Capture any lessons learned and adapt your procedures for the next occasion • Document the condition of the birds upon arrival on the Transfer of Care.

Requirements of the Code of Practice:

Birds that are determined to be compromised prior to loading can only be transported directly to the nearest suitable place where they can receive care or be humanely killed, except an assembly centre. Compromised animals also have a maximum feed, water and rest (FWR) interval of 12 hours.

Compromised Bird Conditions

- Bloated with no signs of discomfort
- Acute frostbite
- Blind in both eyes
- Not fully healed after a procedure
- Lame other than as described in unfit
- Has a deformity or fully healed amputation
- Minor cloacal prolapse
- Is a wet bird
- Exhibits any other signs of infirmity, illness, injury or of a condition that indicates that it has a reduced capacity to withstand transport.

Examples of special handling that could be applied to the mentioned conditions

- Using specialized loading and unloading processes (e.g., covered or partially tarped trailer during loading)
- Additional climate control measures appropriate for the conditions (e.g., trailer tarping and crates layout strategy, reduced speed for less wind velocity and reduced heat loss)
- Taking measures to prevent hypothermia or hyperthermia (e.g., providing heat source, ventilation holes or traps)
- Transporting the animal locally to the nearest place where it can receive care or be humanely killed.

Tips:

Wet Birds

- Are considered compromised under the Health of Animals Act.
- When loaded in cool or cold weather, wet birds significantly cause Deads on arrival (DOAs).
- Every effort should be made to ensure the birds are dry when loaded and stay dry during transport.
- Before catching, birds that are wet in the barn must not be loaded or transported in cold conditions
- Preventing birds from getting wet is essential prior to transportation. Consider covering the load to alleviate cold stress on the birds.

CHECKLIST ITEM #8: CONSIDER FACTORS THAT AFFECT TRANSPORT

All those Involved in the Transport of Animals Must Assess;

- ***the bird's capacity to withstand the transport process and***
- ***the factors that could reasonably be viewed as likely to cause animal injury, suffering or death during the transport process***
- ***the risks prior to loading, confining, transporting or unloading birds.***

Common Risk Factors to Consider

1. ***Loading process by itself***
2. ***Space requirements***
3. ***Ventilation***
4. ***Expected time in transport***
5. ***Foreseeable delays***
6. ***Weather conditions and changes***
7. ***Driving conditions***
8. ***Type and condition of transport equipment***
9. ***Facilities***

These risks must be considered during preparation and documented in your procedures and/or contingency plan.

Plan for optimal outcomes and adapt to changing reality along the process.

An ounce of prevention is worth a pound of cure!

Preparation	Loading	On the Road	Unloading
• Have your procedures ready • Assess the risks and apply your measures accordingly • Communicate your measures to those involved.	• Execute your plan • Adapt • Document your decision and actions.	• Execute your plan • Adapt • Monitor • Document your decision and actions.	• Execute your plan • Adapt • Document your decision and actions and their outcome.

1. Loading Process by Itself – Loading Tips

The catching and loading processes must be planned to minimize bird handling and the time needed to catch and load birds and ensure that each vehicle can leave promptly after loading.

Pre-transport planning must consider the type of housing system, the number of birds that will be shipped and the number of containers needed to ensure maximum loading densities are not exceeded.

Pre-transport feed withdrawal must be managed to minimize the time birds are off-feed. In addition, water must be available to the birds until catching commences.

The catching area must promote safe and humane handling and catching (e.g., lift or remove feeders and waterers prior to catching).

Good loading practices include:
Have a clear, known plan before you begin loading.

2. Space Requirements (density in the crates)

It is the driver's responsibility to know the dimensions of their trailer and proper loading density recommendations for the animals they are loading.

Determine loading density before you begin loading.

- The flock and environmental conditions and the expected journey duration must be considered when loading birds for transport.
- The number of birds in each container must be determined before loading, considering the available container floor space, body size/weight, prevailing environmental conditions, and duration of transport.
- Load birds to the instructed density.

No matter the density recommendations you choose to follow, each bird within the crate or module must be able to rest on the floor at the same time, and birds must be able to move their heads freely without coming in contact with the top of the container.

The recommended maximum loading density values for summer months are 15 - 20% below the recommended loading density for winter months.

Day Old Transport Densities

Recommended Code of Practice for the Care and Handling of Farm Animals: Transportation-Appendix 2 Density Charts

Species	Minimum Floor Space/Bird	Maximum Group Size
Chicks/Pullets	21 cm² (3.255 inch²)	100
Turkey Poults	31 cm² (4.81 inch²)	100
Ducklings	25 cm² (3.88 inch²)	20

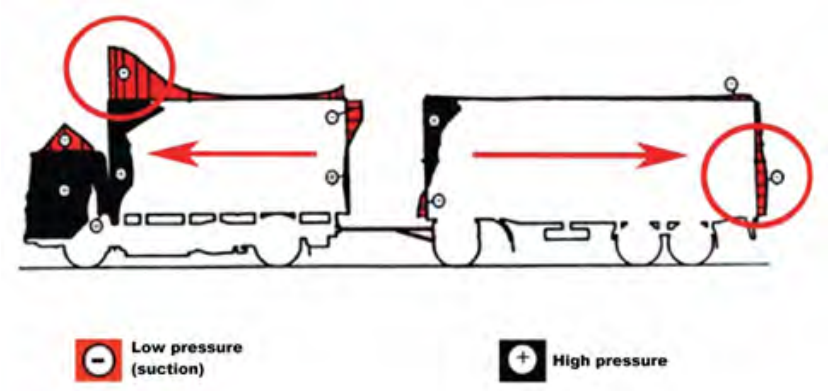
From these guidelines, adapt your density to weather considerations (addressed later in this section).

Loading density should be reduced by approximately 20% for trips expected to take longer than 8 hours from the time of loading to the time of unloading.

3. Ventilation

Trailer design is a significant factor contributing to the uneven airflow and variation of thermal microenvironments on the trailer.

Sometimes, birds within the same load may experience cold stress, while others experience heat stress. Because poultry carriers are passively ventilated or rely on vehicle motion to create airflow through the trailer, understanding the vehicle's aerodynamic characteristics is essential for making decisions regarding trailer ventilation.



Temperature and humidity trends on a B-train during cold weather transportation:

The middle of the load is warmer than the outer edges. WARMEST areas are the front of the lead trailer and the back of the rear trailer.

The COLDEST areas are the back of the lead trailer, and the front of the rear trailer. Moisture accumulates in the warmer areas of the trailer.

4. Expected Time in Transport

As seen earlier in the regulations and codes section, you are working under time constraints when transporting animals.

Make sure to evaluate the total transport time during your planning to stay within permitted limits.

Maximum allowed intervals without feed, water, and rest.

Species and Class	Maximum time interval (in hours) without feed, water, rest
Compromised animal of any species, size, age, sex, or breed	12
Broiler chickens, spent laying hens	24 for safe water 28 for feed
All other animals	36
Day-old poultry (from the time of hatching)	72 (single period, not repeated)

Timing

An interval begins:

- *in the case of feed, when the animal was last fed*
- *in the case of safe water, when the animal was last given safe water*
- *in the case of rest, when the animal was last rested for a minimum of eight consecutive hours.*

Rest Stop Requirements

Rest periods, must not be less than 8 consecutive hours (time to next required rest starts after the animal has been rested 8 hours).

5. Foreseeable Delays

Your transport planning should establish measures to reduce or mitigate avoidable suffering if any unforeseen delays or circumstances could cause avoidable suffering, injury or death.

Examples of unanticipated events that can occur when transporting animals to consider when developing your schedule and contingency plan include:

- road detours, closure or unexpected construction causing delays
- alternate route(s) to avoid long stops in case of accidents, road closure or extended delay
- location of alternate holding areas for animals such as assembly centres (for example, auctions or other slaughter establishments)
- the planned destination has to be changed (for example, plant shutdown) and therefore, what is second option?
- you are asked to load animals without knowing when the producer last fed them
- you are asked to load an animal that you have assessed as unfit
- a journey is longer than expected or unloading is delayed
- accident or rollovers involving animals
- a vehicle breakdown or equipment not working
- inclement weather
- sudden illness of the driver
- a labour disruption
- an animal becomes compromised or unfit during transport.

6. Weather Conditions and Changes

Weather can have a significant impact on the welfare of animals during transport. Therefore, transporting poultry in extreme conditions should be avoided whenever possible, and birds must be handled with extra care during temperature extremes.

Temperature variations can be extreme during a single poultry transport and may require adjusting to weather management tools during transport.

Trailers must be adequately ventilated during hot and cold weather to remove heat and moisture. Excessive heat and moisture build-up can lead to bird suffocation or heat-related bird death.

However, during cold weather, birds must also be protected from points of air entry to avoid cold-related stress.

Monitor the Conditions

- A driver should monitor the weather conditions throughout the trip and as required, adjust the ventilation and cover protection on the unit.
- Birds should be protected from becoming wet during loading, particularly in cold weather conditions.
- Covers on the trucks should be used to protect birds from adverse weather conditions.

Measures must be taken to prevent birds from becoming too hot, cold, or wet during loading and unloading.

When determining whether a flock should be loaded during adverse weather conditions a joint decision should be made, prior to load-out, by:

- ***The Producer***
- ***Catching company***
- ***Hauling company***
- ***Processing plant***

Precautions During Hot Weather Transport

During hot weather, several actions can be taken to minimize heat stress on the birds, including reducing the number of birds per container and keeping the vehicle moving whenever possible.

If the movement for ventilation is not possible, park the unit in the shade and supply an alternate air circulation method, such as fans.

Signs of Heat Stress in Poultry

Chicken-Turkey-Duck

Signs of heat stress in birds may include a combination of the following:

- wings spread and body stretched (when space allows)
- open-mouthed breathing (gasping, not panting)
- "gular fluttering" (a cooling behaviour in which birds open their mouth and rapidly flap membranes in their throat to increase evaporation).

Day Old Chicks/ Poults/ Ducklings

Chick/ poult/ duckling behaviour is an important indicator of proper temperature control.

Signs of heat stress in day-old poultry:

- wing extension
- beaks outside box panting
- very quiet chicks.

Precautions During Cold Weather Transport

- Variations in temperature can be extreme in the course of a single move, especially in western Canada. Depending on the animal type, age, physical condition and applicable weather conditions, environmental protection may include loading dry crates or modules on a tarped trailer before loading for cold weather transport.
- Take advantage of daylight hours for winter transport. Avoid transporting livestock in extreme wind or cold conditions.
- Weather conditions should be observed, and ventilation adjusted accordingly. Too much cold air entering the vehicle could cause vulnerable animals to suffer from frostbite, but not enough air could cause suffocation.

Signs of Cold Stress in Poultry

Chicken-Turkey-Duck

Signs of cold stress in poultry include:

- huddling
- shivering
- ptiloerection (which is where the birds ruffle their feathers to trap air and create insulation)
- feet/comb are cold to the touch.

Day Old Chicks/ poults/ ducklings

Chick/ poult/ duckling behaviour is an important indicator of proper temperature control.

- Signs of cold stress in day-old poultry
- High-pitched chirping
- Huddling
- Feet are cold to the touch.

As the temperature to which birds are exposed during transportation gets colder:

- birds adjust their space usage within the drawer or crate
- bird body temperature and body weight decrease
- meat quality is negatively affected.

7. Driving Conditions and Driving Style

Drivers should demonstrate conservative driving, including gentle turns, throughout the trip so the animals are not thrown off balance which can injure them or lead to bruising.

Assessing Driving Conditions

Assess driving conditions that will be encountered during the trip and adapt accordingly:

- winter road conditions
- spring road conditions
- thaw seasons (affecting maximum load weights)
- highways vs countryside road conditions (adapt your driving accordingly).

Assessing the Driver's Capabilities

Assess the driver's capabilities before sending them on the road with animals:

- skill (driving smoothly, avoiding sharp turns, jarring movements) and alert
- training/experience
- knowledge of the best practice
- preparation
- alertness (is the driver rested)
- distraction.

When qualified livestock truckers are hauling a load, they:

- ***slowly pull away from the loading area, allowing animals time to adjust to the movement of the trailer and the other animals***
- ***drive the first half-hour with extra caution to allow the animals to get situated and gain their footing***
- ***make sure you take turns wide and slow, avoiding soft or angled shoulders and drive with great caution whenever they leave the pavement***
- ***if the driver manoeuvres in a way that causes the top-heavy trailer to lean over, it can reach its point of no return in seconds. This gives the driver little ti me to react and the consequences can be disastrous***
- ***ease into a stop to avoid animal pile-ups and always park on level ground.***

8. Type and Condition of Transport Equipment

No matter the transport unit used, it should be free of protrusions or sharp parts that will injure the birds. The transport containers should contain the birds and not have spaces where the birds can get stuck. The doors should be large enough to ensure easy passage of birds.

The trailer should provide adequate ventilation and cover against extreme weather conditions. Ensure that appropriate, weather-related practices are considered when planning for your trip.The trailer should provide adequate ventilation and cover against extreme weather conditions. Ensure that appropriate, weather-related practices are considered when planning for your trip.

Truck and Trailer

- Trailer should be clean prior to each new load.
- The truck should be fuelled up before loading animals. All fluid levels should be checked. The driver should have everything prepared for loading before backing up to the loading site.
- The truck may need to be weighed before loading begins.
- Upon arrival at loading site, parked where allowed, prepare your trailer and follow instructions.

Once you Arrive at your Destination

- The trailer must be lined up properly for the unloading activities.

9. Facilities

Transporters are **not responsible** for the **facilities** where they **load and unload** animals. Still, they have to be **aware** of the **conditions** they are about to face and **rely on** the **site personnel** for optimal conditions.

If **drivers** notice any **issues** with the loading **facilities**, they should speak to the **producer or management** before commencing **loading or unloading**.

Loading and receiving sites owners and personnel are responsible for:

- **preparing** the facilities for loading and unloading
- **inspecting** the loading areas, balconies or conveyors for any required repairs and making sure they are completed before loading begins
- loading facilities must be **properly designed and maintained** to prevent injury and undue stress to animals and workers during loading
- **easy access** to the loading and unloading areas of the barns must be provided and eaves troughs over loading doors where birds may be exposed to rain water
- the **loading and unloading areas and ramps** must be designed to allow the catching crew to handle birds properly, while door and floor openings must be appropriate for the type of catching
- **lighting is reduced** enough to reduce stress in the birds, but bright enough so the catching crew can see
- **structures must be constructed and maintained** so there are no sharp edges which could cause injury to the birds
- if fans are in use immediately adjacent to loading doors, they should be turned off while birds are being loaded.

Lairage at Slaughter Plant:

If leaving the trailer in lairage, it should be tarped according to plant protocol.

CHECKLIST ITEM #9: PLAN FOR ANIMAL MONITORING PLAN DURING TRANSPORT

Preparation	Loading	On the Road	Unloading
• Be aware of birds' preconditions or risk factors, which may require more frequent monitoring than for a fit birds.	Once the birds are loaded: • walk around the trailer and ensure all gates are closed, and animals are ready to go • double-check you have the appropriate and required paperwork • weigh the truck, if necessary, before leaving the facility • load and go - do not leave the birds waiting on the trailer!	• Check the load one hour after departure and every 2-3 hours after that in moderate temperatures. On a hot day, this check stop should be short as the trailer can heat up quickly when stationary • Check the temperature in the trailer. Make sure it is not too hot or too cold. You may need to adjust winter boards to account for the current temperature • Walk around the entire trailer • Check whether animals are injured, ill or uncomfortable in the trailer and that all crates or modules are still shut and secure • Monitor traffic concerns for the areas you are travelling through and detour to avoid congestion if possible • Keep in touch with your destination on your estimated time of arrival.	• Advise receiving personnel of any welfare concerns (e.g., hot/cold stress, DOAs) noted during transport monitoring • The timeliness of unloading is critical to the overall health of the animals; therefore, unloading should begin as soon as possible.

1. ***Monitoring follows a thorough assessment of the animals in transport because:***
   - ***conditions change over time, and***
   - ***an animal's ability to withstand transportation can change over time.***
2. ***The guiding principles for monitoring of birds during transport ensure that the birds;***
   - ***are fit for the intended transport process before transport begins***
   - ***are monitored on an ongoing basis throughout the process at a frequency which***
     - ***checks that birds remain fit throughout the journey***
     - ***ensures prompt care if something goes wrong***
   - ***monitored by a regulated party who has knowledge and skills of the specific species involved so that avoidable suffering is prevented.***
3. ***When monitoring the birds en route and it seems OK, continue transport but if the birds seems to be compromised or unfit, the only option is to seek the nearest place where the birds can receive care or be humanely killed.***
4. ***If your actions are not recorded, they may be deemed as "not done" by CFIA.***

Tips

Conditions or Risk Factors Which May Require More Frequent Monitoring than Standard Transport for fit birds:

- unusual physiological characteristics of the animals such as, animal class and age, hyper/hypothermic, wet/dry
- climate conditions may affect certain species more than other (for example, transport planning for spent hens during cold and humid weather)
- presence of any pre-existing illness or injury
- presence of any pre-existing conditions of the animal, such as
  - feathering
    - animals that are adapted to warm weather will get cold rapidly in Canadian winters (for example, poultry in temperature-controlled barns, poultry with poor feathering coverage)
- space requirements for the animal
  - space/head room requirements
  - natural position of the animal in transport
- foreseeable conditions that may be encountered during transport, that could result in sharp inclines and declines, vibration and shifting of the container, or swaying of the conveyance.

CHECKLIST ITEM #10: RECORDS

Documentation you want to use to demonstrate compliance with animal transport regulations could include:

- ***training records***
- ***content of the training taken***
- ***assessment of training and how often it needs to be reviewed***
- ***references to validate that the training received is supported by science or best practice***
- ***a demonstration of your contingency plan***
- ***a demonstration or record of the risk assessment criteria used and monitoring you did during transport.***

Preparation	Loading	On the Road	Unloading
Records to consider; • training records • (content, assessment, review, references) • contingency plan • risk assessment • monitoring plan • animal transport records • capture feed, water and rest information from the shipper and receiver.	Records to consider; • loading instructions/ densities • contingency plan • monitoring records • animal transport records • confirm/update feed, water and rest information from the shipper. • do not leave the farm to go to a slaughter plant without the Flock Information Sheet.	Records to consider; • contingency plan • monitoring records • animal transport records.	Records to consider; • evidence of employee training (may be required by slaughter plants) • contingency plan • monitoring records • animal transport records • confirm/update feed, water and rest information from the receiver • Flock Information Sheet • transfer of care.

Documenting on the Go:

- ***Get into the habit of documenting /taking notes of issues encountered, the solutions you provided and the outcome. Documenting the time issues are encountered, calls made, and actions taken are also VERY beneficial to document.***
- ***By doing so, you build records of evidence of your skills and adaptability which you could be used later to demonstrate CFIA how the situation was handled. This information will be very handy if you get investigated many months after the facts.***

<u>Nobody will judge you on the quality of the writing, we look for factual and honest information, that's all.</u>

Transfer of Care

The transporter is legally responsible for the care and welfare of poultry on the truck as birds travel from the hatchery to the farm, the pullet barn to the adult barn, and the farm to the processor.

The Transfer of Care (TOC) document helps ensure the humane transport of animals within Canada. Federal regulations require that transporters give the TOC document to the recipient of the animals before leaving the slaughter establishment or assembly centre. This ensures that there is no interruption in responsibility for animal care.

The TOC document requires the following information:

- condition of the animals upon arrival
- date, time and place when the animals were last fed, watered and rested
- date and time the animals arrived at the slaughter establishment or assembly centre.

Once the **TOC document** has been **acknowledged** by the **recipient**, **responsibility** for the **care** of the animals **shifts** from the transporter **to the establishment**.

The **driver must** complete the required paperwork, including the **Flock Information Reporting Form**.


FLOCK INFORMATION REPORTING FORM

APPENDIX

CONTINGENCY PLAN TEMPLATES

« Model »

2023

Corporate & Prevention Policy

CORPORATE POLICY

Employee Health and Safety

…(…)…

Animal Welfare

…(…)… At all times, promote positive and humane handling of animals. Zero tolerance for animal cruelty…

PREVENTION POLICY

An ounce of prevention is worth a pound of remedies.

Being prepared for an incident before it occurs and understanding how to respond effectively to an incident will make the experience less unpleasant and less perilous for both the humans involved and the animals.

Most front-line responders have little experience with incidents involving livestock carriers. So we have to be prepared to advise them. An emergency plan could be useful to them.

EMPLOYEE TRAINING

All employees or subcontractors working for our company must have completed the following training and obtained the appropriate certifications.

- Drivers 'licence Class 1-2-3
- Development training XYZ
- Occupational Health and Safety Training
- Emergency response training
- Other trucking-related training
- Training on transport and handling of animals
- Corporate training on our transportation emergency plan

PREVENTIVE MAINTENANCE PROGRAM

Our preventative maintenance program ensures that our company's vehicles and trailers meet current standards and requirements. Our preventative maintenance program has been recognized by provincial authorities.

Emergency Contacts

Company	Contact Person	Telephone Number

*** This list is available at all times in the vehicle and updated twice a year.**

List of Potential Hazards

Hazard Category	Hazard	Update Date	Annual Review Date	Management Signature
1. Human factor				
2. Animal				
3. Mechanical				
4. Minor delay				
5. Major delay				
6. Environmental conditions				
7. Minor accident				
8. Major accident				
9. Incident at the plant				
10. Activisits				

The probability and impact of each hazard are assessed vis-à-vis humans (H) and the animal (A) :

Probability (P) :

1-Very likely 2-Probable 3- Unlikely

Impact (I) :

Major for humans (MH), minor for humans (mH), Major for Animals (MA), minor for Animals (mA)

This exercise complements our risk analysis and prioritizes and improves our contingency plan. This exercise is also repeated each year during the annual review.

NOTE: as an example, we have filled in the below table with some elements for a pig transporter.

Human Factor

Hazard	P	I	Mitigation Measure
Health status	2	MH	Annual health check
Trucker fatigure	1	MH	Respect of maximum working hours & health breaks when needed

Emergency Equipment in Inventory

All transport vehicles must contain the following items.

Item	Available
Emergency Contacts	
Warning Devices (flares, signal triangles)	
Camera	
Reference sheet in the event of an accident	
Transport company's standard policy/ procedures in the event of an accident	
Fire Extinguisher	
Anti-Spill Kit	

General Procedure for Responding to an Incident

Note to readers: the complement of information at the end of this document offers other elements you may wish to include in your customized plan. Do not hesitate to extract any pertinent element you may see fit for your situation.

The condition and welfare of the driver is the primary concern. If the driver is uninjured and physically able:

1. Call 911 if the accident occurs on a public roadway or if emergency assistance is required:
   a. inform the 911 operator of the location of the incident and the fact that there is a load of animals and tell him if there are any animals on the loose
   b. suggest that, where possible, police and firefighters do not operate their sirens
   c. if the vehicle catches fire, dial 911 immediately, ensure personal safety, call the dispatch centre and take all documents if leaving the vehicle.
2. Activate emergency warning devices immediately.
3. Call your employer's designated person:
   a. if the company has an incident check sheet, review it
   b. if not, inform the dispatcher of the incident site, the presence of injuries, the condition of the animals, the position of the trailer, the number of vehicles involved and the presence, if applicable, of first responders.
4. Call any other person named in company policy:
   a. these people could be [1] load insurance [2] vehicle insurance and [3] the recipient of the load
   b. ensure that all these people are given the same information.
5. If the truck or trailer has been damaged, move on to Step 7.
6. In a situation where the damage is minor, the trailer is still on its wheels and there are no injuries, take photographs and note the names and contact details of other people involved and witnesses.
7. Gather animals in the wild and take them as far away from traffic as possible.
8. Recover the incident reporting kit and the camera:
   a. take pictures of the incident as soon as possible
   b. take pictures of road conditions, damage to the vehicle, trailer position, general accident scene, braking tracks, curves, intersections and where the vehicle left the roadway (if applicable).
9. Provide as much protection and comfort to animals as possible.
10. Make statements only to the authorities (police officers, firefighters):
    a. do not talk to journalists or passers-by about the incident or the load being transported.
11. When first responders arrive (firefighters, ambulances, police officers), provide them with the following information:
    a. the number of injured people and the nature of the injuries
    b. the type of animals & the number of animals
    c. the presence of free animals
    d. known dangers
    e. employer's emergency plan (e.g., resources on the way, emergency phone numbers).

12. Respecting the chain of command—offering help, if necessary.

13. Rescue and recovery:

    a. clearance procedures differ greatly depending on the side on which the trailer overturned
    b. firefighters are responsible for opening the trailer
    c. never remove pieces from the trailer using a tow truck or a winch
    d. never enter a trailer if there are animals inside
    e. never attempt to straighten a loaded trailer
    f. do not load compromised or unfit animals following an incident; euthanize them on the spot. (SEE EUTHANASIA PLAN)
    g. recovering live animals evacuated from the trailer (SEE RECOVERY PLAN FOR EVACUATED ANIMALS)
    h. disposal of dead animals (SEE DISPOSAL PLAN FOR DEAD ANIMALS).

Recovery Plan for Evacuated Animals

General Recommendations You Need to Plan and Document

Provide a recovery "kit" that could be made available to the truck driver:

- **note**: this equipment can be shared by several transport companies
- retractable fencing
  - or snow fences
- tarps (to be used as a screen)
- duct tape!
- additional handling tools
  - rattle/paddles
  - electric prod
- access ramp adapted to load animals back in the trailer.

Ensure the protection and safety of the animals evacuated and under the responsibility of the driver and his company.

Recovery Procedure:

1. Install a temporary pen near the trailer.
2. Group the animals in the pen or near the trailer, if possible without overhandling them, which would excite them even more, while increasing fatigue risk and thus hindering their recovery.
3. Always handle them in small groups to keep control of the leaders at the head of the groups.
4. Install the right ramp or any other means which would allow you to give the animals access to the trailer.
5. Load the animals.
6. Get to your destination.

Euthanasia Plan

The company must plan how it will proceed in the event that animals in the trailer need to be euthanized. This plan may take into account more common cases of non-ambulatory (fatigued or compromised) animals or a complex euthanasia operation following the rollover of the trailer.

Criteria used to guide decisions about the appropriate time to perform euthanasia:

- pain and distress of the animal
- inability of the animal to walk.

Euthanasia equipment:

- panel or tarp to isolate the animal physically or visually if necessary
- if the company has its own stunners, plan for
  - protocols and maintenance records for stunners
  - list of authorized personnel to use them with recorded proof of training.

Proceed with euthanasia as demonstrated in corporate training.

Confirmation of Death

Regardless of the method used, it is important to quickly examine the animal to confirm its death to ensure the effectiveness of the method. The manifestation of one or more of the following signs shows that the animal regains consciousness:

- rhythmic breathing
- contracted pupils
- attempts to lift the head (righting reflex)
- vocalization
- palpebral reflex (if the animal blinks when passing the finger along the eyelashes, it is because it has regained its sensitivity)
- corneal reflex
- reaction to a painful stimulus (perforation of the nose with a needle)
- natural blinking
- the presence of tone in the jaw.

Disposal Plan for Dead Animals

WHO	Provide an agreement or first contact with a renderer
WHEN	When will we plan to call him. It's a good idea not to wait until recovery operations are complete to notify them.
HOW	Who does it? Who is in charge of providing them with the relevant details.
SPECIFIC EQUIPMENT TO EXPECT	Dependent on your experience.

Records

Upon hiring and annually, management and employees sign a log showing that they have read and understood the company's emergency policy and are committed to implementing it and actively participating in its continuous improvement process.

The updated log should accompany the latest version of the company's emergency plan.

Complement of Information

Source : www.nfacc.ca/codes-of-practice/transportation/code

The National Farm Animal Care Council (NFACC), Recommended code of practice for the care and handling of farm animals – Transportation, 2001.

Appendix 3 Emergency Procedures

General

Vehicle Accidents Involving Livestock

First responders to motor vehicle accidents involving livestock should employ procedures that facilitate the safe and efficient handling of livestock. Assistance should be sought from people with expertise in handling the type of livestock being carried on the vehicle involved. Such people might be found by contacting federal or provincial departments of agriculture or humane societies where available. Local people with expertise might include private veterinarians, farmers or livestock auction personnel. If animals are injured, veterinary advice should be sought immediately.

First Responders, Procedure and Considerations

Before Assistance Arrives

1. Check for injured persons.

2. Evaluate the livestock truck, try to identify the types of animal and numbers carried.

3. Perform crowd control, traffic direction, maintain a clear path for and assist emergency vehicles. Keep unnecessary people away from the accident site.

4. If rescue of people is involved, avoid using sirens and lights as much as possible near live animals. If traffic controls such as police vehicles with flashing lights or flares are necessary, they should be set up as far from the animals as possible.

5. Always deal with loose, mobile animals first. Such animals will be frightened, disoriented and excited. Frightened animals are unpredictable and will react instinctively by running or fighting. If possible, allow them to calm down before trying to move them.

6. It is very important to remain calm and quiet. Take your time and be patient. Stay alert, you may need to move quickly. Always have an escape route for yourself. Any animal is potentially dangerous.

7. Once the loose animals have quieted down:

- **DO NOT shout, yell or wave arms wildly**
- **DO NOT approach an animal from directly in front** unless you must protect an injured person
- move animals to a safe area slowly and in a group
- move **slowly** toward the animals from the rear half of the animal, and slightly to one side. Once you are in the animal's personal space (flight zone) it will move forward. Move back outside the flight zone to stop forward movement. If you enter the flight zone too deeply, or too quickly, the animal will try to run - you do not want this. This space may be 15 feet or more from the animal; and
- animals may be temporarily penned with portable fencing, snow fencing, trucks, yellow police tape (which resembles electric fencing), or at sales yards, factory yards, well-constructed sheds, etc.

8. Deal with conscious, badly injured animals second. Keep people away. Injured animals are less likely to struggle to their feet if left alone.

9. To quiet a struggling injured animal which is lying down (e.g. broken leg), place a blanket over its eyes, leaving the nostrils exposed, and press down lightly on the neck just behind the head with a knee. Talking to the animal in a calm, quiet voice and gently stroking or scratching it may also help.

10. Comatose animals are not aware of any pain and may be left for last. Animals lying down with seizures or paddling of the legs may indicate serious head injuries. Unless these animals show signs of regaining consciousness, such as lifting the head, looking about, or trying to rise, they may be left.

11. If a comatose animal does not blink when the clear part of the eye is touched, it may be dead. Check for breathing by positioning yourself at the animal's back, near the shoulder and place a hand on the chest.

12. Spilled animal fluids and body fat may result in hazardous road conditions.

13. Injured animals may bite, particularly horses and pigs. Such animals should be muzzled by some method such as a bridle, rope, belt, etc.

14. **All animals may kick, bite or attack if frightened or injured.**

15. Diversified livestock species such as bison, deer, elk, wild boar, emu, ostrich, mink, foxes, and others present additional complexities in an emergency situation. Many of these species retain and exhibit "wild behaviour traits" and are more likely to respond with "fright, flight, or fight" reactions in situations of close contact. The flight zone is typically much larger for these species than for more traditional livestock and their reactions to intrusion in that flight zone may be much more violent.

Bison handle like wild, athletic cattle, with a strong herd instinct and an aggressive attitude. They need plenty of space and options for movement. Deer vary substantially in behaviour of the different ages, genders, breeds, and at different times of the year. Generally, males are in hard antler and are most aggressive during the breeding season, from September through November. The larger the animal, the morelikely they are to fight with antlers or kick or strike with their hind and front hooves. Smaller deer are more likely to take flight and their ability to leap can be quite spectacular.

Wild boar will usually choose flight if an avenue of escape is available, but they may attack and bite if cornered. This species is much more athletic than most farmed pigs.

Ostrich and emu appear similar, but their nature is quite different. Emu are more manageable and behave more like a herd animal than do ostrich. Ostrich can be aggressive, and can kick or strike with tremendous force in close quarters. Both species may be slowly and carefully herded.

Furbearers such as mink and foxes are usually transported as breeding stock in separate cages. Because of their more "wild" nature, all of these species are more susceptible to stress. To minimize this concern in emergency situations, use the following techniques:

- crowd control must be a top priority to avoid injuries to both the animals and people
- avoid the use of bright or flashing lights, sirens or loudspeakers. All excited animals handle more easily and remain more calm in conditions of reduced lighting and soft noises
- call for expert advice and assistance. The Canadian Food Inspection Agency may be able to identify someone locally with experience in handling the specific type of animals involved.

After Assistance Arrives

1. Ensure loose animals are under control in as secure a manner as possible. Assign someone to watch them to report problems and keep people from approaching them without authorization.

2. Advise police of assistance available, on call, or already at the scene such as veterinarians, department of agriculture staff or humane society/SPCA officers. Assist as required with evacuation, crowd control, and traffic direction.

3. Assist police to control bystanders, vehicle and pedestrian traffic to ensure that animals are not disturbed unnecessarily.

4. Notify trucking company dispatcher, owner and/or receiver to obtain direction. Make arrangements for trucking or have surviving animals moved to a safe location. Loose animals may be moved into a nearby well-fenced enclosure, a well-constructed barn or shed, or onto another vehicle if their injuries are not severe. Temporary strong enclosures are acceptable. Nearby fenced manufacturing premises may also be suitable temporarily. The idea is to confine the loose animals so that people in the area are protected from injury.

5. Seriously injured animals must be examined by a veterinarian if at all possible. Animals in serious pain or with untreatable injuries may need to be euthanized. Recommended methods for euthanasia of mammals in order of preference are administration of a euthanizing drug by a veterinarian; stunning with a captive bolt pistol followed by slitting of the throat performed by experienced personnel; gunshot euthanasia performed by an experienced police officer, conservation officer or SPCA special constable. Gunshot euthanasia is a dangerous procedure and must only be performed as a last resort under controlled conditions (See Appendix 4).

Types of Injuries You May See

Burns

Where animals have been exposed to fire or electric shock, expect burns of varying degrees similar to those seen in human beings. Burns cause extreme pain.

The greatest danger with burns is shock. Isolate the animal and keep it calm. As soon as possible, cold water should be poured over the injured area for ten to fifteen minutes. If possible, after cooling a clean, dry cloth or bandage may be laid over the injured area.

Where burns are extensive (most of or entire body) and/or severe (deep down to bones and muscles), the animal should be humanely killed as soon as possible. Where burns are less severe, the animal should be seen by a veterinarian as soon as possible and may be sent for immediate slaughter or treated.

DO NOT apply lotions, oils or salves. DO NOT prick blisters, breathe, cough on, or touch the injured area as this may lead to severe infection.

Fractures and Dislocations

Types of fractures seen at accident sites include simple (leg hangs limply at an abnormal angle), compound (a broken bone sticks out of the flesh), or multiple (more than one bone is broken in one animal).

With fractures, the animal may not be able to use a limb, it may move awkwardly or limp severely, one leg may be shortened, deformed or pointing in the wrong direction. You may be able to hear bones rubbing together.

Dislocations (a limb out of its normal joint) may result in loss of use of a limb, one joint larger than the same joint on the other side of the animal, the affected part does not move easily or is deformed. You may not be able to tell a fracture from a dislocation.

Large animals, such as horses or cows, are best left on site until a veterinarian can arrive. If the animal is able to walk, guide or direct the animal to a safe area (for example to a temporary enclosure at the side of a road). If the animal is down on the road it may be necessary to destroy it on site to expedite cleaning of the accident site and prevent further accidents. If the vehicle can be moved and an animal is still on the truck, the vehicle may be directed to the nearest veterinary facility or slaughter plant.

A fractured spine is extremely painful and an animal may be very aggressive. With such a fracture animals are usually unable to rise and there may be no movement in the hind legs. With less severe fractures, an animal may be up and moving normally or have a swaying gait in the hind end. A veterinarian should examine the animal as soon as possible.

Amputations should be dealt with immediately. If the animal cannot be slaughtered immediately, it should be recommended for humane euthanasia. Amputations can result in severe hemorrhage, uncontrollable at an accident site.

Hemorrhage

There are three basic types of hemorrhage or bleeding. Arterial bleeding results in bright red blood in a spurting action, venous bleeding results in dark red blood that wells continuously and capillary bleeding results in oozing action.

External bleeding from wounds is obvious and can be dealt with by direct pressure or tourniquets. Open wounds should be kept as clean as possible. They may be flushed with water to clean out any debris, but do not apply any ointments.

Internal bleeding can result in severe shock and death. Signs of internal bleeding are listlessness, unconsciousness, very cold legs or a blue tinge to the pink skin inside the lips or tongue. If the animal is not euthanized it should be kept warm and confined until a veterinarian can attend.

Consciousness

Brain injury may result from a skull fracture, hemorrhage inside the skull, suffocation, drowning, shock or electric shock. Signs you may see are confusion, loss of balance, the animal may go into shock, or it could convulse. Until a veterinarian can attend, lay animal on its side and ensure it can breathe by keeping its head and neck in roughly the same position it normally would if standing.

In all cases comatose animals will not respond to yelling or touching. If a comatose animal does not blink when the clear part of the eye is touched it may be dead and should be checked for breathing and heart beat.

Comatose animals are not aware of any pain due to injury. Unless these animals show signs of regaining consciousness, such as lifting the head, looking about, or trying to rise on their own, they may be left, and conscious and mobile animals dealt with first.

Suffocation

Suffocation may result from piling of animals against the front, rear or sides of a trailer. Rollovers may result in suffocation of animals on the bottom of a pile-up. Suffocation may also result from smoke inhalation due to carbon monoxide from fires.

Remove live, mobile animals from a pile up as soon as possible. Some of the animals underneath may recover. As they do, they can be removed. Do not attempt to revive those that do not recover on their own. It may be necessary to humanely destroy such animals. Remember that animals involved in this sort of accident may also have other injuries, such as fractures.

Complement of Information (continued)

Electric Shock

Electric shock in a transport accident may result from high tension wires falling on the truck. Electric shock may result in the death of animals, shock, burns and fractures.

Drowning

Truck accidents involving bodies of water are rare. Most animals can swim if not injured, but those that are trapped inside a vehicle are likely to drown. Animals in such a situation will panic and should be assisted only where the safety of human handlers can be assured.

Source: Adapted from *Vehicle Accidents Involving Livestock*, Halton Regional Police Service (Ontario), 1996.