

# North American Biosecurity Protocols

Version 1.0 (updated 11 April 2024)

## Purpose

As a partner to the dairy industry, our priority is always safety, which includes the wellbeing of people and the animals that are responsible for producers' livelihoods. Preserving the health of a dairy herd is essential to the financial stability of each operation regardless of size. All dairies have significant financial investments in their animals and animal loss due to disease can be economically devastating. This policy contains biosecurity guidelines to help DeLaval employees conduct safe, productive visits to farms in North America. DeLaval protocols will be made available to customers and dealers upon request.

## Scope

This document outlines the biosecurity PPE and behavior requirements DeLaval employees must follow when visiting any dairy farm in North America. These requirements vary between biosecurity levels 1-5. Before visiting any farm in North America, employees should communicate with the DeLaval dealer and farm owner to understand the farm's current biosecurity protocols. If the farm does not have biosecurity protocols, they are unknown or unclear, or their protocols are less stringent, employees should follow the DeLaval guidelines as appropriate. If a farm requests additional measures be taken compared to what DeLaval recommends, employees should honor the customer's request.

## Table of Contents

1. **Biosecurity Classifications**
  - [Level 1](#) - Everyday biosecurity
  - [Level 2](#) - Elevated awareness
  - [Level 3](#) - Heightened alert
  - [Level 4](#) - High alert
  - [Level 5](#) - Foreign animal disease outbreak
  - [Summary charts](#) (pages 11-12)
  
2. **[Other Guidance](#)**
  - Associated costs
  - Contact with livestock outside of work
  - Employees living in Level 3-4 zones
  - DeLaval trainings
  - DDS vehicle protocol
  
3. **[Definitions](#)**
  - Animal area
  - Tours/group visitors
  - Nonessential activities
  - Essential activities
  
4. **[Communication Tree](#)**

## Biosecurity Classifications

### Level 1 = Everyday Biosecurity

#### *Personal protective equipment (PPE)*

- Disposable boots or disinfected rubber boots and laundered clothing must be worn at time of entry to the farm and worn any time an employee is on farm, even if not in animal areas.
  - Boots should be disinfected at the time of entry and time of exit.
  - OR disposable boots should be placed on the feet prior to exiting vehicles and removed before entering vehicles. Dispose of boots on the farm or in appropriate “dirty” containers in vehicles.
- Wear gloves when in contact with animals. Wash hands with soap and water before and after handling animals.

#### *Behavior*

- All essential and non-essential activities can take place without restrictions.
- Park in visitor-designated areas and do not drive vehicles into animal areas.
- Minimize contact with animal areas unless necessary to perform work.
- Employees will avoid visiting different animal-type areas within a farm. If unavoidable, they must wear disposable PPE (coveralls and boot covers) and initiate the visit with the healthiest, lower risk or younger animals.
- Minimize multiple farm contacts within the same day if possible. If not possible, disinfect boots or change disposable boots between visits.
- Tours/group visitors originating in country will minimize exposure of host farm to visitors and vice versa. Provide attendees with disposable boots and avoid contact with animal areas. If animal areas must be visited, provide visitors with disposable coveralls. This includes DeLaval-hosted trainings.
- Tours/group visitors originating from outside of country of origin must wear disposable boots and coveralls when on farm and avoid contact with animal and feed areas. It is recommended that all foreign travelers have no livestock contact for 21 days after returning to their home country.
- Employees will keep a log of all farms visited and the areas of each farm for a minimum of two weeks.

### Level 2 = Elevated Awareness

In this scenario, there are known challenges at farms in specified areas that are contagious and may adversely affect animal and/or human health.

#### *PPE*

- Disposable boots or disinfected rubber boots where appropriate and laundered clothing must be worn at time of entry to the farm and worn any time an employee is on farm, even if not in animal areas.
  - Boots should be disinfected at the time of entry and time of exit.
  - OR disposable boots should be placed on the feet prior to exiting vehicles and removed before entering vehicles. Dispose of boots on the farm or in appropriate “dirty” containers in vehicles.
- When in contact with animals or animal areas:
  - Wear gloves.
  - Wash hands with soap and water before and after handling animals.
  - Wear freshly laundered clothing, laundered reusable coveralls or disposable coveralls.
  - Change PPE when moving into different areas within the farm.
- Place reusable PPE in a designated “dirty” container in the vehicle and launder prior to reuse. Leave disposable PPE on the farm if possible. If not possible, place in designated “dirty” containers.
- If multiple people are to visit, consolidate transportation vehicles.
- It is a recommended practice to spray down tires of vehicles with an approved disinfectant at end of dairy drive before leaving. Alternatively, disinfect tires or wash vehicle at the end of the day.

### *Behavior*

- All essential and non-essential activities can take place. Additional restrictions may be necessary based upon specific disease of concern. More information will be made available through the Biosecurity Level Awareness Map updates. .
- Employees will make appointments with DeLaval dealership and farm ownership explaining purpose of visit, where work will be performed and why. Employees should share DeLaval Biosecurity Protocols and inquire if the farm requires additional measures or limitations.
- Park in visitor designated areas and do not drive vehicles into animal areas.
- Minimize contact with animal areas unless necessary to perform work and follow all PPE guidance associated with animal area contact.
- Employees will avoid visiting different animal-type areas within a farm. If unavoidable, employees will wear disposable PPE (coveralls and boot covers) and initiate the visit with the healthiest, lower risk or younger animals.
- Limit unnecessary personal items and tools (ex: backpacks, tool bags, tools) on farm and in animal areas.
- Employees will minimize contact with multiple farms in same day. If unavoidable, wear disposable boots or disinfect boots between farms using approved disinfectant.
  - If visiting animal areas of multiple farms, consider wearing disposable or laundered coveralls at each visit. Do not wear visibly dirty clothing into any animal area of any farm.
- Tours/group visitors originating in country will minimize exposure of host farm to visitors and vice versa. Provide attendees with disposable boots and avoid contact with animal areas. If animal contact must be made or prolonged exposure to animal areas is required, provide visitors with disposable coveralls. This includes DeLaval hosted trainings.
- Tours/group visitors originating outside of country of origin must wear disposable boots and coveralls when on farm and avoid contact with animal and feed areas. . It is recommended that all foreign travellers have no livestock contact for 21 days after returning to their home country.

- Employees will keep a log of all farms visited and each area of each farm for minimum of two weeks.
- If a specific disease challenge is known, additional protocols may be required. More information will be made available through the Biosecurity Level Awareness Map updates.

### **Level 3 = Heightened Alert**

In this scenario, there is a known outbreak of a contagious disease that regulatory officials are monitoring and/or customers have directly expressed concerns about. The outbreak may be confined to a different state, region or country. Awareness will be made throughout our global organization.

#### *PPE*

- Disposable boots or disinfected rubber boots if appropriate and laundered clothing must be worn at the time of entry to the farm and worn any time an employee is on farm, even if not in animal area.
  - Boots should be disinfected at the time of entry and time of exit.
  - OR disposable boots should be placed on the feet prior to exiting vehicles and removed before entering vehicles. Dispose of boots on the farm or in appropriate “dirty” containers in vehicles.
  - If returning to the same farm multiple days, not visiting other farms, AND not in any animal areas, you do not need to launder after every visit. If reusing clothing, you may be required to wear disposable coveralls.
- When in contact with animals or animal areas, in addition to the above, you must:
  - Wear gloves.
  - Wash hands with soap and water before and after handling animals.
  - Wear freshly laundered clothing laundered reusable coveralls, or disposable coveralls.
  - Change PPE when moving into different areas within the farm.
- All disposable boots/clothing should be discarded at the farm last visited or placed in designated “dirty” containers in the vehicle.
- At the end of each day, launder all clothing and disinfect boots, even if disposable options were worn.
  - For corporate travellers, prepare to travel with a “clean” bag option and a “dirty” bag option to accommodate potentially exposed clothing. Alternatively, launder clothing at remote location (ex: hotel) prior to traveling home.
- Vehicle tires must be disinfected at the end of farm drive when leaving premises.
  - For corporate travellers, disinfection of rental cars may not be feasible. Discuss options for disinfection with host dealership and/or host farms or severely limit movement from farm to farm. Alternatively, wash car after each farm visit.

#### *Behavior*

- Every effort should be made to perform nonessential work remotely or offsite. All on-farm activities must have direct approval by farm owner in advance.

- Communicate directly with the farm owner and dealer to confirm if any visits or work should be made by DeLaval employee. Also communicate about the planned biosecurity protocols and verify if any additional measures should be taken.
- Park in visitor designated areas and do not drive vehicles close to animal areas.
- Minimize contact with animal areas unless it is necessary to perform this work; follow all PPE guidelines associated with animal area contact.
- Employees will avoid visiting different animal-type areas within a farm. If unavoidable, they must wear disposable PPE (coveralls and boot covers) and initiate the visit with the healthiest, lower risk or younger animals.
- Limit unnecessary personal items and tools (ex: backpacks, tool bags, tools) on farm and in animal areas.
- With every effort, employees will minimize contact with multiple farms in same day. If unavoidable, appropriate PPE must be followed on each farm based upon areas of farm visited.
- Tours/visitors and DeLaval trainings originating within the country affected are subject to postponement or limitation of visitors. This will be at the discretion of the host farms, DeLaval personnel and potentially at the recommendation of regulatory authorities. Provide attendees with disposable boots and avoid contact with animal areas. If animal contact must be made or prolonged exposure to animal areas is required, provide visitors with disposable coveralls. This includes DeLaval hosted trainings.
- Tours/visitors originating outside of the country affected will be cancelled and rescheduled after the biosecurity threat level in area decreases to Level 2 unless considered essential business by appropriate DeLaval leadership team. Foreign DeLaval employees should have no livestock contact for 21 days after returning to their home country.
- Visitors from within a Level 4 zone should not visit/tour customers outside of the Level 4 zone unless they have had no animal contact for at least 7 days. List of attendees and origins will be made available to the host farm. Host farms have the discretion to limit visitors.
- Employees will keep a log of all farms visited and each area of the farm for a minimum of two weeks.
- If a specific disease challenge is known, additional protocols may be required. More information will be made available through the Biosecurity Level Awareness Map updates.

#### **Level 4 = High Alert**

In this scenario, a contagious disease is being monitored over a specific area by regulatory authorities. Authorities may suggest or require limited farm contact and movement. Employees must follow all local or national requirements. PPE and behavior requirements are subject to change depending upon the specific disease challenge and scientific knowledge progression. Up to date information or changes required to this protocol will be available in the Biosecurity Awareness Level Map update.

#### *PPE*

- Employees not in contact with animal areas must wear disinfected or disposable boots and disposable gloves while on the farm.
  - Boots should be disinfected at the time of entry and time of exit.
  - OR disposable boots should be placed on the feet prior to exiting vehicles and removed before entering vehicles. Dispose of boots on the farm or in appropriate “dirty” containers in vehicles.
- Employees that enter any animal area, with or without the presence of animals, in addition to the above requirement must wear either clean, laundered coveralls that have not been worn on any other farm since cleaning or disposable coveralls. These must be worn after arrival to the farm and changed when moving to different animal areas or even when visiting the same farm over multiple visits or days.
- If in close contact (less than 6 feet) with animals, employees must also wear safety glasses and N95 masks.
- Dispose of coveralls and boot covers at the end of the visit. Disinfect boots. Place used clothing in a designated area of the vehicle.
- At the end of each day, launder all clothing and disinfect boots, even if disposable options were worn.
  - For corporate travellers, prepare to travel with a “clean” bag option and a “dirty” bag option to accommodate potentially exposed clothing. Alternatively, launder clothing at a remote location (ex: hotel) prior to traveling home.
- Vehicle tires must be disinfected at the end of the farm drive when leaving the premise.
  - For corporate travellers, disinfection of rental cars may not be feasible. Discuss options for disinfection with host dealership and/or host farms or severely limit movement from farm to farm. Alternatively, wash car after every farm visit.
- Vehicles should be cleaned daily.

### *Behavior*

- All nonessential work must be conducted remotely or offsite or postponed.
- Essential work can only be performed with written consent of the dairy owner— DeLaval personnel must confirm with the dairy owner. This can be by email, a signature on a work or service order or similar type of acknowledgement.
- Park in farm designated areas only and do not drive vehicles to other farm areas.
- Every effort should be made to eliminate animal contact areas unless essential to perform work.
- Employees will avoid visiting different animal-type areas within a farm. If unavoidable, they must wear disposable PPE (coveralls and boot covers) and initiate the visit with the healthiest, lower risk or younger animals.
- Limit unnecessary personal items and tools (ex: backpacks, tool bags, tools) on farm and in animal areas.
- With extreme caution and with every effort, employees should minimize visiting multiple farms within 24 hours within the Level 4 zone.
  - If this is not possible, it is imperative to follow all PPE recommendations and behaviors.
  - For corporate travellers, expect disruptions to travel plans and last minute cancellations or changes.
- DeLaval employees that have been on farm(s) in Level 4 zone cannot visit farm(s) outside of Level 4 zone for at least one week after last contact.
- All tours/group visits hosted by DeLaval within the Level 4 zone will be cancelled and rescheduled after the biosecurity threat level in the area decreases to Level 2. This

includes DeLaval trainings. This recommendation should also be made available to any customer, dealer or industry sponsored event.

- Visits by foreign company employees may only occur if deemed essential by appropriate Leadership team, and additional protocols may need to be developed based upon the individual situation. Any foreign visitor should have all clothing laundered and disinfected prior to their departure and will not have any livestock contact for 21 days after returning to their home country.
- Visitors from within a Level 4 zone should not visit/tour customers outside of the Level 4 zone unless they have had no animal contact for at least 7 days. List of attendees and origins will be made available to the host farm. Host farms have the discretion to limit visitors.
- Employees will keep a log of all farms visited and each area of the farm for a minimum of two weeks.

#### **Level 5 = Foreign Animal Disease Outbreak**

- Follow all state and federal regulatory requirements.
- No farm contact by any DeLaval employee.

## Other guidance

### Associated costs:

- Employees are eligible for expense reimbursement for costs they incur when following the DeLaval Biosecurity Protocols or the protocols of a customer. This includes:
  - PPE (disposable boots, gloves and coveralls).
  - Rubber boots, reusable coveralls, tools for cleaning and disinfection
  - Disinfectant products for boots and vehicle tires.
  - Car washes.
  - Airline fees for additional carry-on luggage to transport PPE and/or clean or dirty clothing.
  - Costs associated with laundering clothing at remote locations.
- Approved PPE can be found on the [Biosecurity SharePoint page](#).

### DeLaval employees that live on livestock operations or have contact with livestock outside of work events:

- Be aware of Biosecurity Awareness Levels across your working territory.
  - Plan your work and travels taking into consideration where your personal exposure is located and the risk you may pose to your home farm and/or customers.
- Separate clothing and boots are required for personal and work use. They should be stored separately.
- During times of elevated alert, limit your contact with customer farms. Follow all biosecurity recommendations for each level to protect your customers and home farm.
- Wash your car 1x/day when at Level 2-3 and traveling between home facilities and customer locations. At level 4, disinfect tires when leaving every farm, including personal farm, and wash your car 1x/day.

### DeLaval employees that live in Level 3 or Level 4 areas and not exposed to livestock while at home:

- Understand that there may be a perception that you pose an increased risk to farms outside of your home territory and that work-related farm visits and/or trips may be rescheduled at the request of customers.
- Communicate our Biosecurity Protocols to concerned customers and how your actions can minimize risk.
- Honor any request by customers to cancel, limit or postpone your visit.

### DeLaval hosted trainings:

- Minimize vehicles on host farms, and park in designated areas away from animal and feed storage areas. Vehicles that have been on other farms should not be used to transport attendees to host farm.
- All attendees must wear disposable boots when on the farm during any training.
- Avoid animal contact areas. If unavoidable, all attendees must wear disposable coveralls and initiate the visit with healthier, lower risk and younger animals.
- If handling animals, disposable gloves must be worn, and hands should be washed with soap and water before and after handling the animals.



- Trainings and/or attendees are subject to cancellation or rescheduling based upon threat level.

#### DeLaval Dairy Service Vehicle Protocol:

- If possible, chose a route and parking area that is free of visible manure. Do not drive into animal areas.
- Clean the vehicles at least one time per week at the end of the day or more frequently if the vehicle has been exposed to manure, if the known disease status on the farm is a concern, or if the threat level has increased to Level 3 or higher.
- Clean the interior of the vehicle whenever the exterior is washed (a minimum of once per week), requiring the following:
  - Vacuum the entire interior of the vehicle.
  - Wash and clean all floor mats.
  - Clean the brake and gas pedal and any other contaminated surfaces.
  - Spray floor mats, brake and gas pedals and dirty area with approved disinfectant.
- All vehicles are to have a designated “dirty area,” which includes a plastic tote with lid or other container where dirty clothing, boots, etc. in the vehicle should be stored. Dirty clothing or boots should not be worn on another farm until they are laundered and the boots disinfected.
- Each vehicle must always have the following supplies on board:
  - A box of pull-over disposable boots and/or bucket, brush, and approved disinfectant.
  - A box of disposable hand gloves.
  - Hand sanitizer.
- Drivers must put on a pair of disposable boots before getting out of a vehicle. Once the delivery or service is complete, remove and dispose of the boots at the farm or place them in the truck’s “dirty” container. Alternatively, drivers can disinfect boots when leaving each farm stop.
- Increasing PPE and Behavior requirements is based on the threat level and at the discretion of DDS leadership.

## Definitions

#### Animal Area:

- Defined as any area on the farm in which cows are housed, held or milked (whether cows are present at the time of entry or not) and/or feed is present or stored, and/or manure is visible.

#### Tours/group visitors:

- Will include any DeLaval representative that the farm is hosting outside of normal business activities. Examples include, but not limited to: visits by product developers and leadership.

Nonessential activities:

- Prospective sales calls.
- Tours.
- Customer interviews.
- Advisory or technical work that can be performed remotely.
- Conferences.
- Customer acceptance or field trials related to new product development or product launch (pending degree of alert).
- DeLaval technical or advisory trainings, including trainings not hosted on farm.
- Sales trainings, including trainings not hosted on farm.

Essential activities:

- Closing sales calls, if unable to be performed remotely or off-site.
- Service, maintenance or advisory work that impacts machine function and/or animal or human health and safety.
- Delivery of consumables or essential parts.
- Equipment installation (at the discretion of the farm owner).
- New equipment start-up (at the discretion of the farm owner).
- On-farm work associated with product development, but at the discretion of DeLaval Leadership.

## Communication tree

It is the responsibility of every DeLaval employee to report information about contagious animal diseases in their area.

1. Employee – to direct manager
2. Direct manager – to Kristy Campbell and Carolina Mateus.
  - a. At Level 2, NALT is alerted.
  - b. At Level 3, the Crisis Committee of Americas is alerted.
3. NALT to all North American field-based and exposed personnel (Solution Management, sales, technical, advisory, DDS, PMD engineering, R&D technical).

## General Recommended PPE Guidelines

See Description for More Detail

Required 
 Not required 
 No farm visits

	Clean/laundered clothing	Disposable boots or Disinfected rubber boots	Disposable or laundered coveralls	Hand washing	Gloves	N95 mask	Safety glasses or goggles	Disinfect tires	Clean vehicle
Level 1 – No Animal area exposure									
Level 1 – Animal area exposure									
Level 2 – No animal area exposure									
Level 2 – Animal area exposure									
Level 3 – No animal area exposure									
Level 3 – Animal area exposure									
Level 4 – No animal area exposure									
Level 4 – Animal area exposure						*Animal Contact Only 	*Animal Contact Only 		
Level 5									

## General Recommended Behavior Guidelines

See Description for More Detail



Required



Not required



No farm visits

	Business Activity Restrictions	Animal Area Contact	Multiple Farm Contacts within Same Day	Tours/Visitors/ Trainings Within Country of Origin	Tours/Visitors/ Trainings from Outside Country of Origin	2 week log of all on-farm activities
Level 1 – No Animal area exposure	None	Minimize	Minimize + PPE	PPE required	PPE required	
Level 1 – Animal area exposure	None	Minimize	Minimize + PPE	Minimize + PPE	Minimize + PPE	
Level 2 – No animal area exposure	None	Minimize	Minimize + PPE	PPE required	PPE required	
Level 2 – Animal area exposure	None	Minimize	Minimize + PPE	Minimize + PPE	Minimize + PPE	
Level 3 – No animal area exposure	Reduced Nonessential	Limit	Limit + PPE	Restrict + PPE		
Level 3 – Animal area exposure	Essential Only	Limit	Limit + PPE	Restrict + PPE		
Level 4 – No animal area exposure	Essential Only	Restrict	Restrict + PPE *Restriction after Level 4 visits*			
Level 4 – Animal area exposure	Essential Only	Restrict	Restrict + PPE *Restriction after Level 4 visits*			
Level 5	No Activities Permitted	No Animal Area Contact Allowed	No Farm Contacts Allowed			