

# LOADING, UNLOADING & TRANSPORT BIOSECURITY

**VARGA LAB**  
INFECTIOUS DISEASE EPIDEMIOLOGY

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UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

A greater threat to farm biosecurity occurs when loading, transporting and unloading of cattle. Follow stringent biosecurity measures to prevent disease entering into the farm.

## LOCATION

A designated area must be constructed for loading and unloading cattle. It should be at least 200 feet away from cattle ranch and waterways.



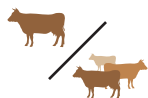
## DESIGN of the loading/unloading area and chute:


From ranch to holding pens, alley from pens to working area then to restraining area or squeeze chute lead to the loading/unloading area.

The **holding pens** should have at least 20 square feet for each adult and 14 square feet for each calf. For example, 1200 square feet pen can accommodate 35 adult cattle and 35 calves.

**20 ft<sup>2</sup> per**   
**14 ft<sup>2</sup> per** 

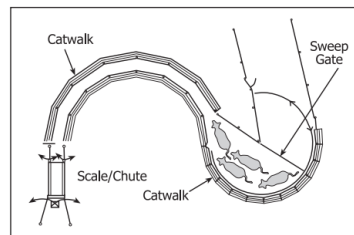
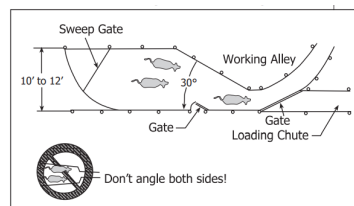
The holding pens can be one or several, depending on the size of farm. One of the pens should be an area for quarantining newly arrived or returned animals.



Always supply the water in the holding pen. 

The **gate** of holding pen should be at least the width of the alley or greater.

The **alley** connect the holding pens to the working area. The width of alley should be 10-12 feet.

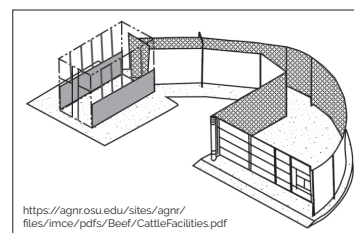


**Crowding pen** funnels cattle into the working alley or chute. Maximum of 10 cattle should be crowded at a time in this pen.

One side of the crowding pen (from where cattle enter) should be 8-12 feet with other side narrowing at an angle of 30 degrees.

Crowding pens could be straight or circular but latter works best.

Gates in the crowding pens leads the cattle to working alley or chute.



<https://agmr.osu.edu/sites/agmr/files/mce/pdfs/Beef/CattleFacilities.pdf>

The **working alley** should be constructed to facilitate only the unidirectional flow of animals.

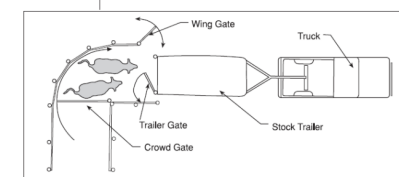
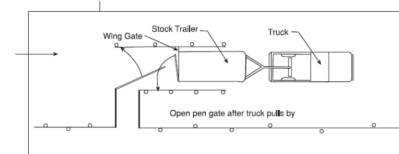
The working alley should be of at least 20 feet long with back-stop gates.

The width of alley depends on the size of cattle. The alley should be 22-26 inches wide for small-medium frame adult cattle and 18 inches for calves.

The alley works better with solid sloping sides and recommended to build alley of 5 foot height, 26 inches width at top and 16 inches width at bottom.

As cattle move forward easily with solid sides, uphill and from dark to light areas, build the facility accordingly.

The alley that lead to loading chute should be separate from alley that goes to squeeze chute area.



Lines should be demarcated between clean and unclean areas to prevent physical contact between farmworkers and livestock transport vehicles and its driver and movement from one side to another of the demarcation line must be prohibited.

**Chute** is required to load cattle on stock trailers or trucks.

The height of the chute should fit such away that you can back the vehicle squarely against the chute.

If possible, build the sides of loading chute solid (wood or metal) allow cattle move easily to truck.

The ramp of chute should be 10-12 feet long and 3-4 feet high.

The wooden floored chutes are commonly used with cleats 1-2 inches high with 6-8 inches between the cleats.

For cow-calf operation, the loading chutes should be 30-36 inches wide.

The loading area should be at least 200 feet by 200 feet for trucks to move easily.

## ➔ LOADING ➔

### BEFORE LOADING

#### The truck driver must ...



Ensure that the transport vehicle used for loading the animals is empty, clean, and disinfected before arrival on the farm.



Inform the farm office about their arrival in advance and inform them about the cleanliness status of the vehicle to the farm manager.



Follow farm biosecurity protocols while entering the farm and park the trailer only in the loading and unloading area.



Change into clean coveralls and boots from his/her biosecurity kit before starting the loading process.

#### The farm manager must ...



Ensure the loading chute is clean and disinfected.

### DURING LOADING

#### The truck driver must ...



Climb in the trailer and identify and establish the demarcation between clean and dirty areas and ensure not crossing the demarcation line at any point during the process.



Line the trailer and chute with bedding material to avoid injury to the animals due to slipping.

#### Farmworkers and the truck driver must ...



Not cross the demarcated clean and dirty line during loading process.



Avoid direct contact with cattle by using a board or stick to guide their movement.



Prevent cattle from turning and moving back into the clean area.



Maintain records of loaded cattle.

### AFTER LOADING

#### The truck driver must ...



Secure the gates of the transport vehicle properly.



Change coveralls and boots and store them in the dirty bin before entering the cab of the trailer. Dispose of the disposables in a trash bag in the cab.



#### The farm manager must ...



Instruct the employees to clean and disinfect the loading/unloading chute and alley before using it for another loadout or load-in.

## ➔ TRANSPORTING ➔

### DURING TRANSPORT

#### The truck driver must:



Choose the traveling route that has low cattle farm density.



Avoid bumpy trails.



Check on animals from outside of the trailer at frequent intervals.

## ➔ UNLOADING ➔

### BEFORE UNLOADING

#### The transport driver must ...



Change into clean coveralls and boots from his/her biosecurity kit before starting the unloading process.



Climb in the trailer and identify and establish the demarcation between clean and dirty areas and ensure not crossing the line at any point during the process.

#### The farm manager must ...



Ensure the unloading chute is clean and disinfected.

### DURING UNLOADING

#### Farmworkers and the transport driver must ...



Avoid direct contact with loading cattle, use a board or stick to guide their movement.



Prevent cattle from turning and moving back into the trailer from the clean area.



Maintain records of unloaded cattle.

### AFTER UNLOADING

#### The transport driver must ...



Sign the required paperwork.



Remove the dirty boots and coveralls and store them in the dirty bin and send it for cleaning and disinfection.



Clean and disinfect the trailer and allow it to dry before the next delivery.

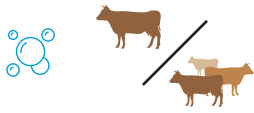
#### The farm manager must ...



Instruct the employees to clean and disinfect the loading/unloading chute and alley before using it for another loadout or load-in. The newly arrived animals must be held in a quarantine pen for a minimum of 30-40 days before mixing with the existing stock.



# REMEMBER!



The farm manager must instruct the employees to clean and disinfect the loading/unloading chute and alley before using it for another loadout or load-in. The newly arrived animals must be held in a quarantine pen for a minimum of 30-40 days before mixing with the existing stock.



Cattle sorting and holding pens should allow handling without undue stress, be located near the loading/unloading facility, and be suitable for herd size.



Provide properly designed and maintained loading facilities for easy and safe animal movement. Proper design of loading chutes as well as personnel that are knowledgeable of their proper use can assure the safety of both cattle and cattle handlers. Ramps and chutes should be strong and solid, provide non-slip footing, and have sides high enough to keep cattle from falling or jumping off. A ramp angle of 30 degrees or less will improve cattle movement.



All vehicles used to transport cattle should provide for the safety of personnel and cattle during loading, transporting, and unloading.



Strictly adhere to safe load levels with regard to animal weight and space allocation.



Producers hauling cattle in farm and ranch trailers must ensure that adequate space is provided so that cattle have sufficient room to stand with little risk of being forced down because of overcrowding.



Cattle that are unable to withstand the rigors of transportation should not be shipped.



When the vehicle is not full, safely partition cattle into smaller areas to provide stability for the cattle and the vehicle.



Knowingly inflicting physical injury or unnecessary pain on cattle when loading, unloading or transporting animals is not acceptable.



No gap which would allow injury to an animal should exist between the ramp, its sides, and the vehicle.



Vehicle doors and internal gates should be sufficiently wide to permit cattle to pass through easily without bruising or injury.