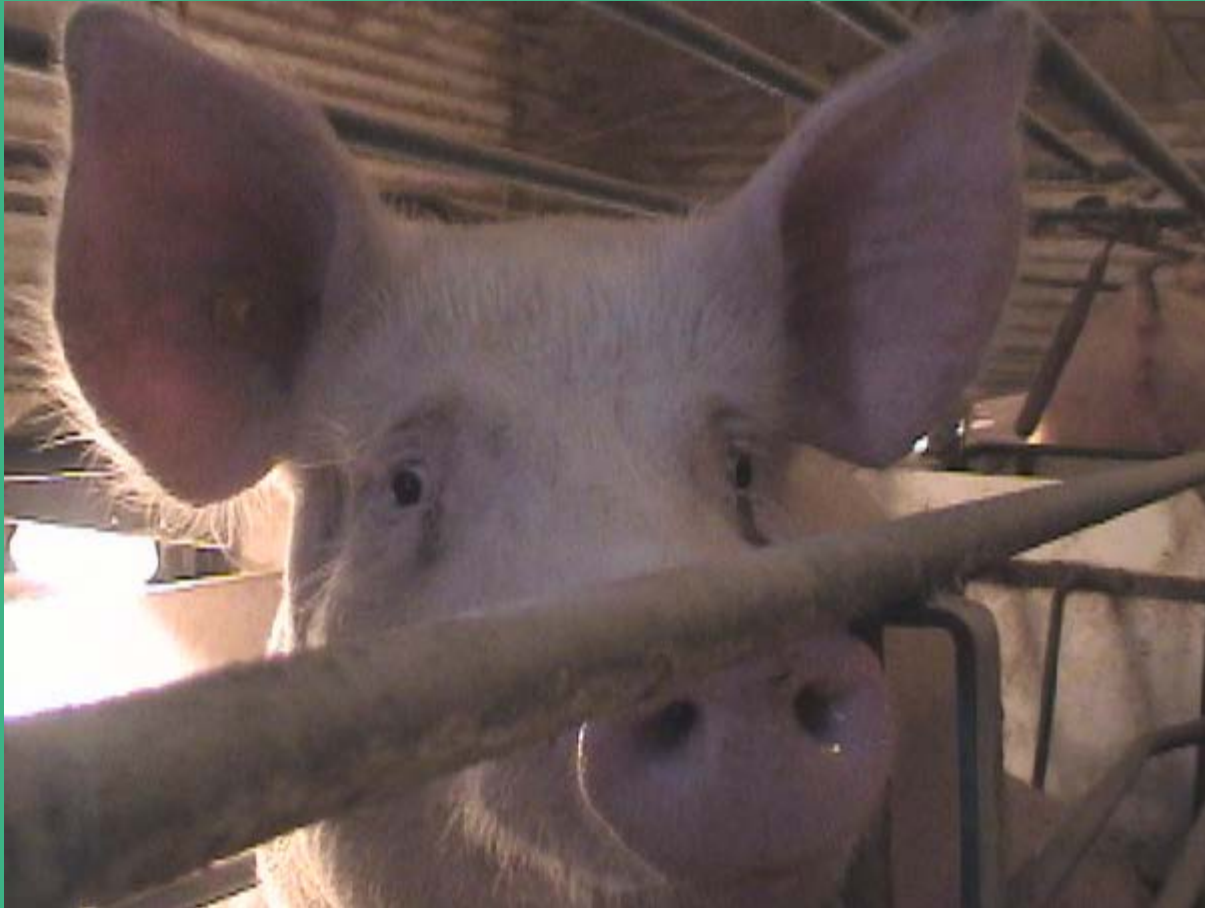


# SWINE FARM SCENARIOS

# FARM 1



# FARM 2



# FARM 1

- 1500 animals on this farm
- 300 sows (Yorkshire x Landrace) and 10 boars (Duroc); remainder are young stock
- Manager has a bachelors degree in swine management
- There are 3 full time employees and 6 students that help with the management of the facility

# FARM 2

- 300 animals
- 35 sows and 4 boars; remainder are young stock
- Breed is crossbred Yorkshire and Landrace
- Owner of the farm inherited it from his parents
- Current owner and his son take care of the farm and animals

# FARM 1

- Sows are permanently housed in gestation stalls
  - moved into conventional farrowing crates 7-10 days prior to parturition
- Boars are housed in their own pens
- Post-weaning, pigs up to eight weeks of age are housed in nursery pens with their littermates
- After eight weeks of age, pigs are either sold or transferred to finishing pens



# FARM 2

- Most sows and boars are permanently housed together in a large straw-bedded pen
  - 4-H pigs are housed in groups of 4-6
- Sows are moved into farrowing crates 7 days before the expected farrowing date
- Weaned pigs are housed in solid plastic tubs with littermates until 6 months of age
  - then are moved into the large group pen (video)



# FARM 1

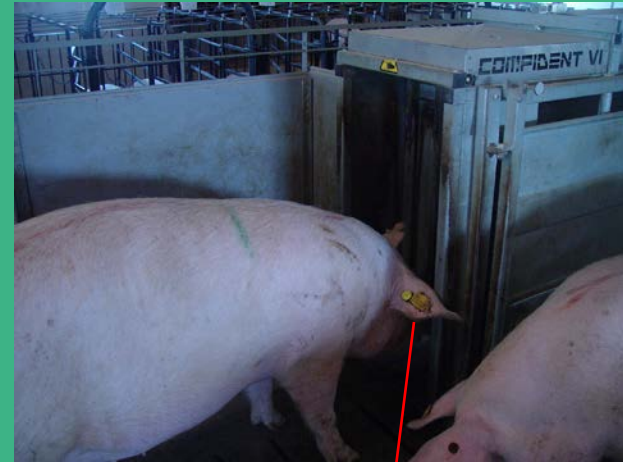
- **During pregnancy,** sows are fed a corn-soybean meal mixture
- Sows receive restricted feed rations once daily
- They have *ad libitum* access to water





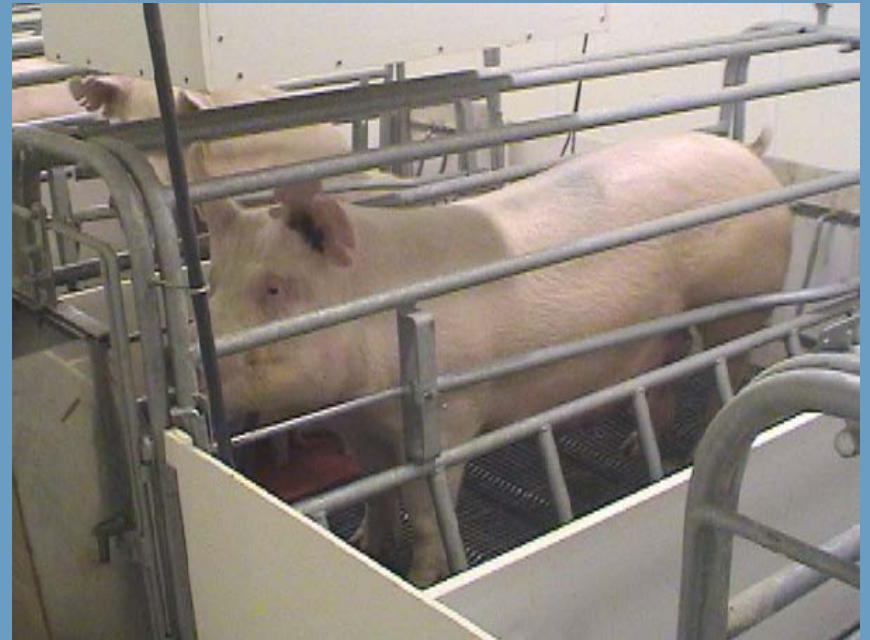
# FARM 2

- **During pregnancy** sows are fed a corn-soybean meal mixture
- Sows receive restricted feed using a computerized feeding station activated by an ear transponder
- They have *ad libitum* access to water



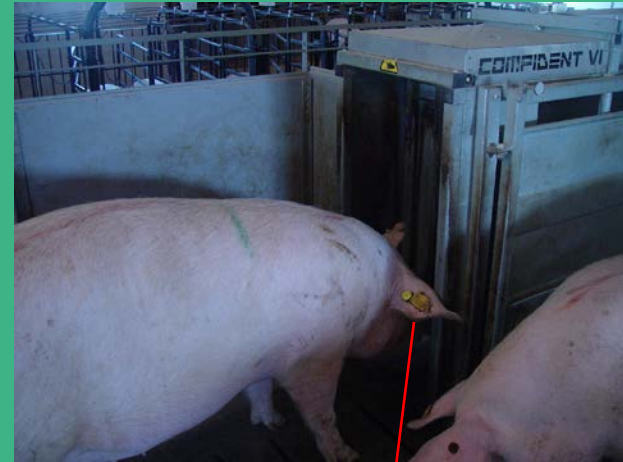
# FARM 1

- Sows housed in gestation stalls are able to feed simultaneously. The stockperson manually activates the food delivery system at 7:30 am



# FARM 2

- Feeding cycle starts at 3:00 pm for the group-housed gestating sows. Dominant sows (30% of the group) tend to eat first (between 3:00-8:00 pm)
- Subordinate sows are often displaced at the feeding station, and tend to eat after 10:00 pm
- Some sows (2-3/day) need to be taken to feeding station every day



# FARM 1+2

- **Lactating sows** are fed a diet which consists of corn, soybean meal and wheat bran
- During lactation, sows are fed *ad libitum* unless their body condition score is above 6 on a 1-9 scale
- Water is offered *ad libitum*

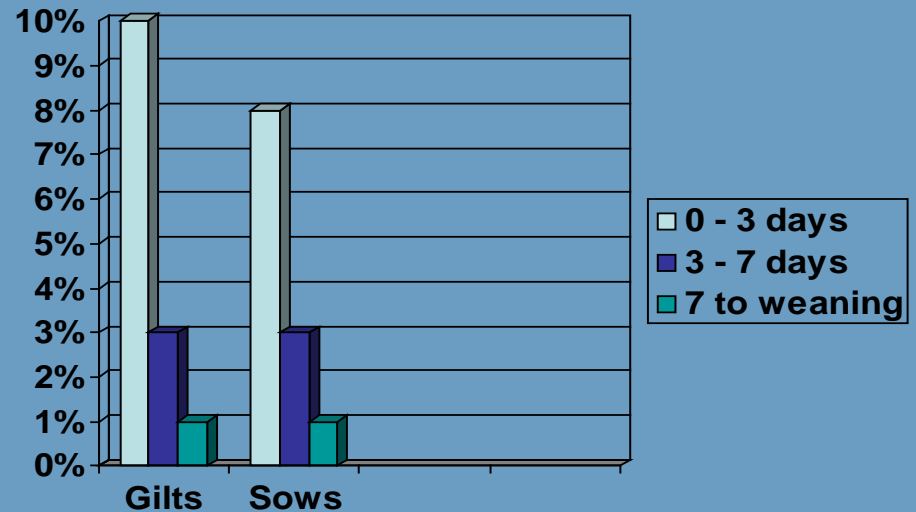


# FARM 1

- Lactating sows are housed in conventional farrowing crates throughout lactation



Piglet mortality

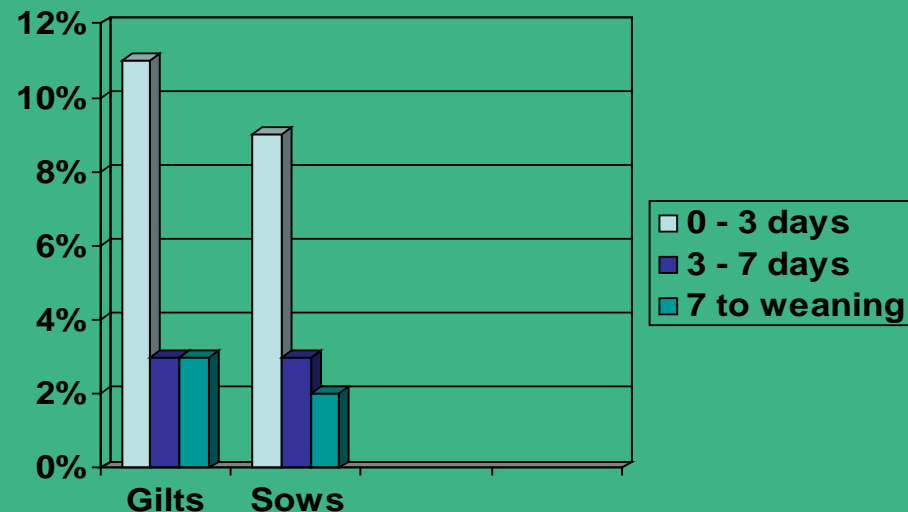


# FARM 2

- Lactating sows are housed in modified farrowing crates which allow the sow enough room to turn around
- During the first 7 days of lactation, the movement of the sow is restricted
- From day 7 to weaning age the side panels are lifted to allow the sow and piglets interaction



**Piglet mortality**



# FARM 1

- All pens and crates have fully slatted metal flooring
- Manure is collected in underground pits and removed via an automated conveyor system
- All rooms are fitted with a fan ventilation system



# FARM 2

- Pens have solid floors and pigs are provided with straw bedding
- Pens are cleaned out weekly
- Housing facilities open to outside air to allow natural ventilation





# FARM 1

- 55 % of sows show signs of skin abrasions and minor lesions
- Incidence of sow lameness is between 15-18%
- Pigs are inspected 1x/day
- Sick or injured animals are removed from the pen and treated



# Farm 2

- 35% of sows show signs of abrasions and skin lesions
- Two sows had ear lesions indicating recent aggressive interactions
- 5% of sows show some degree of lameness



- Pigs are inspected twice a day
- Sick or injured animals are removed from the pen and treated

# FARM 1

- The performance of stereotypies varied from 10-35% of observation time (7:30 am – 6:00 pm)
  - Bar-biting was recorded in 45% of the sows prior to feeding time
  - Sham-chewing was present in 55% of the sows post-feeding



# FARM 2

- Bar-biting is not observed
- Sham-chewing is present in 10% of the sows post-feeding



# FARM 1

- At 1 day of age, piglets are ear notched, tail-docked, given an iron injection and males are castrated
  - No anesthesia is used
- Twice per year, sows are vaccinated for E. coli, Leptospirosis and Parvovirus

# FARM 2

- Between 3 and 5 days of age, piglets are ear notched, tail-docked, given an iron injection and males are castrated
  - No anesthesia is used
- At 6 months of age, sows are vaccinated for E. coli, Leptospirosis and Transmissible Gastroenteritis (TGE)
  - Booster vaccination carried out twice a year
- They are also given medication in their feed to prevent round worms

# FARM 1

- Weaning is carried out every two weeks for piglets between 14–21 days of age
- Litters are removed from the sow and placed in pens (5' x 3')(1.5 x 0.9 m) in climate-controlled nursery rooms until eight weeks of age
- In nursery pens, weaned pigs are fed a 3-phase diet (pre-starter, starter and follow-on feeds)
- Water is provided by nipple drinkers (one per pen)



# FARM 2

- At 14 days of age, high digestibility solid feed is provided in the farrowing pen
- Weaning occurs between 21-28 days old
- The pigs are placed in solid-sided plastic tubs (3' x 2')(0.9 x 0.6m) with littermates until 6 months of age
- Feeding boards are used initially and removed 3-4 days post-weaning
- Low-lip cup drinkers provide free access to water





# FARM 1

- Responses to weaning:
  - Mean vocalization rate = 8.2 calls/min per piglet (day of weaning)
  - 326.1% mean increase in urinary cortisol (24h post-weaning)
- Mean body weight at 6 weeks of age = 13.42kg

# FARM 2

- Responses to weaning:
  - Mean vocalization rate = 3.9 calls/min per piglet (day of weaning)
  - 204.9% mean increase in urinary cortisol (24h post-weaning)
- Mean body weight at 6 wks of age = 11.94kg