

## Pig Movement Principles

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#### TAKE HOME MESSAGES:

- 1. Pigs are prey animals, so use the pig's senses when humanely moving them.
- 2. Use proper forms of restraint based on pig size.
- 3. Reduce or mitigate negative human-animal interactions when working with pigs daily.

## **Understanding Pig Behavior**

Swine are prey animals and have a natural tendency to flee. They are also herd animals and are less stressed when with other familiar pen mates. (TQA Handbook) When approaching a pig, whether in a pen of animals or an individual, they may have the urge to move away. While trying to move, it is important to protect yourself, the pig you wish to move and other pigs from injury. Pigs are very curious and explore the environment with their mouth, known as rooting. When pigs misdirect this rooting onto other pigs, it can result in tail biting. Factors that can reduce this biting include appropriate space, proper enrichment, and efficient resources.

Pigs will establish a social order, which involves one animal becoming the dominant individual for that specific group. When pigs are added or removed from groups, social order is reestablished and can be a stressful event for the group. (CFSPH 2012)

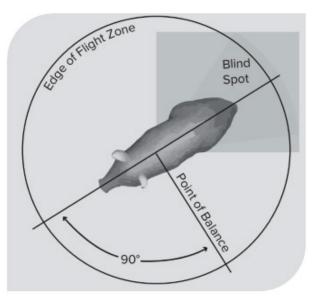
## Pig Movement

There are three main characteristics about pigs that are important to know when trying to move them. Pigs have a very sensitive "flight zone", "point of balance", and "senses". A pig's flight zone is pictured in Figure 1. The flight zone is what an animal considers to be their personal space.

An animal's flight zone can differ depending on how much and the type of human interaction they have encountered. When a pig's flight zone is impaired, the animal will move in the opposite direction, trying to maintain a safe distance between them and the caretaker. When moving pigs, it is important to understand the change in their body language and general behavior. If pigs become stressed, such as abnormal vocalization, stiffness, muscle tremors, or the reluctance to move, release the pressure, and allow the pigs to calm down before continuing. (TQA Handbook)

A pig's point of balance determines which way the pig is going to move away from the caretaker, as shown in Figure 1. (TQA Handbook) Most commonly, the point of balance is located at the pig's shoulder. As the caretaker stands behind the point of balance, the pig will begin to move forward. As the caretaker moves in front of the point of balance, the pig will begin to move backward. The point of balance can differ based on specific environments and is not always applicable in trailers or barns.

Figure 1: Flight zone, blind spot, and point of balance of a pig. Pork Checkoff Transport Quality Insurance (Version 8 TQA)



Swine have a great sense of hearing and smell and use them extensively to navigate their environment. Their eyes provide an advantage to their other senses sense due to not having great depth perception directly in front of them but allowing them to see 310 degrees around their body. This also creates a blind spot directly in front and behind them. When moving pigs, they will actively try and keep the caretaker out of their blind spot, so it is important to work slowly and stay calm when moving pigs. (Ericka 2021.)

#### **Proper Handling Mechanisms**

Humane restraint is a popular mechanism used when performing many different tasks, such as bleeding, vaccinating, euthanasia, etc. There are many ways to restrain a pig, depending on their size. Piglets are restrained by picking them up by the hind leg above the hock and carrying them in front of the restrainer's chest, as shown in Figure 2. Do not pick them up by the ears, head, tail, or front legs, and avoid swinging the pig in the air. When releasing the piglet into its pen, make sure there are two points of contact before releasing, for example, both front feet touching the ground.

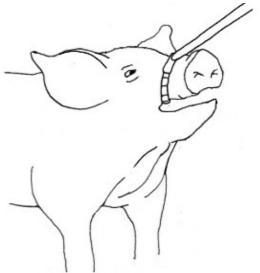
Figure 2: Small Pig Restraint.

Illustration by Mary Breuer, Swine Medicine Education
Center. Funding Provided by USDA APHIS through the
National Animal Disease Preparedness and Response
Program for the development of the Certified Swine
Sample Collector training program.



When restraining a larger animal, a restraining snare is used as shown in Figure 3. It is important that the restrainer has had proper training with this tool for the safety of the animal and the caretaker. Remember not to restrain the pig for longer periods of time, move the pig with the snare, or tie the pig up with the snare.

Figure 3: Large Pig Restraint by Snare
Illustration by Mary Breuer, Swine Medicine Education
Center. Funding Provided by USDA APHIS through the
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Pigs can also be handled using noise shakers, sort boards, and general flight zone principles. When moving animals, the caretaker must be able to always control the lead animal. As the pigs get bigger, it is important to decrease the number of animals in your groups. When moving sows and boars, it is important to move animals based on their general behavior. These animals require extra precaution when handling due to their aggressive behaviors, especially with boars and sows in estrus or near farrowing.

Keep in mind that there are a few general handling tips:

- Never corner an isolated animal.
  - o This could create a dangerous situation for the animal and the caretaker.
- Sows and piglets should be separated prior to handling the piglets.
  - o Sows can become aggressive when their young are touched.
- Avoid sudden movements that may startle the animals.
- The back blind spot should always be avoided due to possibly causing injury to the animal or caretaker.

# Relationship Between the Caretaker and the Pig

When considering pig, it is critical to understand the human-animal relationship. The caretaker must read the pig because the pigs are reading the caretaker's behavior. Often when caretakers are working pigs, it is during stressful events, such as vaccinations and weaning. So, be mindful, mitigate these negatives by spending extra time in the barns, walking calmly through chores, and employing the previous handling mechanisms. A pig will become fearful of humans after 15-30 seconds of negative activity. (Edwards, 2017.) It is important to reduce the stress factors, fearful stimuli and to balance these with positive interactions. Stressed pigs will have reduced production, and increased health challenges. Sows and gilts that are fearful will have fewer pigs born per sow and sometimes an increase in stillborn pigs. Finisher pigs that are stressed will have inferior meat quality. (Ericka 2021.)

REVIEWER: Dr. Anna Johnson, Iowa State University

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