

SECTION 3: EARLY PIG CARE

The objectives of early pig care are to:

- Stimulate and maximize feed intake post-weaning
 - Provides necessary nutrients during a highly energy-dependent stage
 - Initial diet has important impact on gut structure
- Achieve optimized production levels relating to losses (1% nursery mortality)
 - Reduce losses due to failure-to-thrive syndrome
 - Control and treat secondary infections
- Accomplish optimized nursery average daily gain (ADG) and feed conversion (F:G) levels; ADG=1.00, F:G=1.3
 - Improve overall cost of production

Different strategies of care are required for varying health statuses. The following are several factors to consider for highly health-challenged pigs, as well as healthy pigs, based on the results relative to the goals.

- Optimal temperature and humidity
 - Health-challenged pigs require warmer room temperatures and humidity control, resulting in elevated utility costs.
 - Workers should be highly sensitive to humidity and environmental changes within the barn.
- Effective timing and efficient application of critical care
 - Challenged pigs require intensive and frequent husbandry. Be prepared to increase the labor effort and oversight accordingly.
- Use of gruel-feeding strategies and equipment, to which health challenged pigs respond favorably.
- Facilitation of communication among all levels of the production team. Reaction time to achieve the best results is critical.
 - Weaned pigs' progress can change rapidly, and producers should respond quickly.
 - Critical personnel include the veterinarian, field person and producer.

Receiving

Before pigs are received, conduct an audit to ensure the cleanliness and the biosecurity of the site.

- If given the opportunity, it is ideal to receive pigs directly off the sow (preferably, from a single-sow farm). This minimizes staging nursery requirements when used in combination with a twice-per-week weaning strategy.
 - The basis of this recommendation is that multiple weaning events create added stressors. The goal is to achieve stable health status within the barn quickly.
- Space requirements:
 - PIC recommends a minimum of 2.8 sq ft per weaned pig until the pigs reach 50 pounds.
 - During the extended nursery period (50–75 lbs.), allow 3.65 sq ft/pig.
 - For health-challenged pigs, maximizing the allotted square footage (+6.5 sq ft/pig — W-F facility) when given the opportunity is preferred.
 - This practice can have a significant impact on mortality and morbidity.
- The facility should be fully warmed to the desired room temperature.
 - Health-challenged pigs often require a 5-degree increase in desired room temperature.
 - If brooders are in use, mat temperatures should be at 95°F and dry upon arrival.
 - This process may require reduced minimum ventilation and the activation of heaters and brooders 4–6 hours prior to arrival.

- Inventory within pens:
 - A strategy should be utilized to allow ample space to pull pigs from the general population into a specific intensive-care area.
 - The intensive-care area should be located toward the center of the barn, thus minimizing temperature variation throughout the day.
 - Removals from the general population should take place at different times:
 - At placement, any challenged piglets should immediately be placed in intensive-care pens.
 - During daily observations, animals with compromised body condition should be moved to the intensive-care area for both treatment and gruel feeding.

Smalls

Sorting lightweight and low-body-conditioned pigs on wean day into a separate hospital pen improves their likelihood of success. The smaller the average pig's wean weight is, the greater the number of pigs that will need to be sorted.

- Prioritize the most digestible and palatable feed that is budgeted or available in your feeding program.
- Remember to reserve the next budgeted diet so that "smalls" do not get skipped over while general population pigs consume this diet.
- Normal stocking density and feeder space apply.
- Keep gruel pans near waterer or feeder and away from sleeping area to ensure pigs stay dry.
 - Wash and clean gruel pans in alleyway to ensure pen space stays dry.
- Ideally, smalls should be placed in an area of the barn that has few drafts and can utilize a supplemental source of heat, like brooders.

Ventilation

The critical components of ventilation include:

- Desired room temperatures
 - Health-challenged pigs require a 2–5-degree warmer barn
- Humidity control
 - It is critical that the humidity remains below 65%
- Warm and dry mats

PIC generally recommends 2 CFM/pig at placement; however, in the case of PRRS-positive pigs, it may be necessary to remove air at a higher exhaustion rate to achieve less than 65% humidity.

- Brooders should produce temperatures around 95°F directly beneath them. Pigs should remain warm, dry and comfortable.
 - To accomplish this, use properly functioning brooders and ample mat space (0.4 sq ft/pig).
 - An example of warm and dry pigs with ample mat space is pictured at the right.
 - If mats become wet or caked with feed or manure, flip mats over to regain a dry, black surface that effectively absorbs heat.
 - Mat temperatures may need to extend beyond 95°F to accomplish pig comfort.



- Brooders should be in place and functional for 14–21 days, depending on pig comfort and the severity of the disease.
- Brooders should be in place within intensive-care pens throughout the grueling period.

Pen walking

Pens should be walked daily to:

- Look in each feeder to ensure the feeder has the proper amount of feed and that it is clean.
- Look in the trough of each feeder to ensure that feeder is adjusted correctly and that there is the correct amount of pan coverage.
- Inspect the floor of the pens for excessive wetness, accumulation of manure and signs of diarrhea.
- Inspect each pen for damaged or bent rods that could injure pigs by sticking out into the pen.
- View every pig from snout to tail, head to toe; rule of thumb is to spend 2 seconds per pig.
 - Identify and pull fall-behinds.
 - Identify, pull and treat sick pigs.
- Check water flow rates.
- Mat feed.



Properly adjusted feeder — meal feed



Properly adjusted feeder — pellet feed.

Photos provided courtesy of Kansas State University.

Managing fallback and sick pigs

Starting weaned pigs is the most critical task in a wean-to-finish production. Pigs that start well tend to experience rapid growth and improved feed conversion unless presented with significant health challenges. Unfortunately, the opposite is true in pigs that start tough, who tend to be a challenge all the way to marketing. One of the most common challenges in hard-starting weaned pigs is identifying sick pigs vs. starve-out pigs. Medications are beneficial to sick pigs but do not provide calories to starve-out pigs. Correctly identifying the root cause allows for proper management.

Identifying sick pigs

Observe each and every pig individually every day. Identify and treat sick pigs at the direction of your veterinarian. The first 14 days post-weaning is a crucial time to find hard-starters.

- **Respiratory diseases**
 - Pigs may exhibit coughing, thumping, open-mouthed breathing or depression
- **Scours**
 - Pigs may have loose stool, inflamed rectums or feces staining the back legs
- **Lameness**
 - Pigs may be unwilling or unable to stand up, limp when walking and have swollen joints or swollen legs
- **Strep**
 - Pigs may appear uncoordinated, tilt their head, walk in circles or be down-paddling

Identifying fallback pigs

Sick or “starve-out” pigs should be moved to a hospital pen as needed upon inspection. These pigs should be restarted and pulled into a fresh pen and provided with additional nutrition, including gruel feeding and mat feeding.

- **Lost body condition score**
 - Watch for pigs with a visible spine, hip bones or ribs
- **Gut fill**
 - Identify pigs that have sunken-in flanks
 - Hold the pig upside down by its back legs and place your thumb over the pig’s back and your fingers over the pig’s abdomen, squeezing your fingers toward your thumb to evaluate gut fill
 - If your fingers easily depress the abdomen, the pig is off feed
 - If abdomen is full, with plenty of resistance, feed intake is adequate

Gruel feeding

- At placement, it is preferable to supply gruel feed to each weaned pig for the first 2–3 days.
 - Each pen should have a 3-gallon pan per 15 heads or utilize a PVC trough, allowing 3 inches of bunk space per pig. (45-head pen requires a 5½-ft. canoe per pen — 4–6 inches (PVC).
- The recipe for gruel feeding (per 15 pigs):
 - 24 oz. of water and ½ lb. of feed
 - Gruel feeding should be applied 4 times per day for maximum results
 - Gruel feed is properly calibrated when the pigs consume all of the mixture within the hour
- This step is highly labor-intensive but is a positive step in early acclimation to a new environment for an already challenged pig. Field results have shown positive economic and performance results.
- Gruel feed within intensive-care pens for 7 days.
 As intensive-care pigs recover and improve body condition, an evaluation should be made 3 times per week. Recovered pigs should be moved to a graduation area free of gruel feeding.

Examples of gruel feeders



Mat feeding

- The goal of mat feeding is to stimulate the activity level of the pigs and act as a “dinner bell” to eat.
- The transition from a sow’s 20–24 lactation events per day to an ad-lib environment sometimes challenges piglet feed intake.
- Consider mat feeding for a minimum of 7 days post-weaning.
- Schedule
 - Mat feeding should take place:
 - At the beginning of morning chores
 - At the conclusion of morning chores
 - Noon
 - With evening chores

