

The objectives of early pig care are to:

- Stimulate and maximize feed intake post-weaning
 - o Provide the necessary nutrients during a highly energy-dependent stage
 - o Initial diet has an important impact on gut structure
- Achieve optimized production levels relating to losses (1% nursery mortality)
 - o Reduce losses due to failure-to-thrive syndrome
 - o Control and treat secondary infections
- Accomplish optimized nursery average daily gain (ADG) and feed conversion (F:G) goals
- 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
 - o Health-challenged pigs require warmer room temperatures and humidity control, resulting in elevated utility costs.
 - o Workers should be highly sensitive to humidity and environmental changes within the barn.
- Effective timing and efficient application of critical care
 - o 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. A prompt reaction time is critical to achieving the best results.
 - o Weaned pigs' progress can change rapidly, which makes a quick response critical.
 - o Include key personnel, such as the veterinarian, field person and producer, in your communications.

Early feeder management

- Avoid overfilling feeders, as doing so may cause the feed to become stale, absorb odors and become unpalatable quickly.
- It is best to provide less than 12 hours' worth of feed per feeding to maintain freshness.
- Use a tube extension or socks to maintain an appropriate quantity of feed in the feeder.

Receiving

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

- Recognize that pigs received directly from a single-sow farm will have minimized staging nursery requirements compared to a twice-per-week weaning routine.
 - o The basis of this recommendation is that multiple weaning events create added stressors. The goal is to achieve a stable health status within the barn quickly.
- Space requirements:

Age	Wean-50 lbs.	50-75 lbs.	W-F facility
Size (sq ft/pig)	2.8	3.65	6.5

- o For health-challenged pigs, maximize the allotted square footage (+6.5 sq ft/pig in a W-F facility) if possible.
- o This practice can have a significant impact on mortality and morbidity.

- The facility should be fully warmed to the desired room temperature.
 - o Health-challenged pigs often require a 5-degree increase in the desired room temperature.
 - o If brooders are in use, mats should be dry and set at a temperature of 95°F upon arrival.
 - o This process may require reduced minimum ventilation and for heaters and brooders to be activated 4 to 6 hours before arrival.
- Inventory of pens:
 - o Consider keeping one to two pens empty to allow ample space to pull pigs from the general population into a specific intensive-care area.
 - o The intensive-care area should be near the barn's center, thereby minimizing temperature variations throughout the day.
 - o 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 conditions should be moved to the intensive-care area for both treatment and gruel feeding.
- Use a drip nipple to provide clean, clear water for the first three to five days after pig placement. A nipple bar could also be useful in some situations.



Smalls

Sorting lightweight and low-body-conditioned pigs on wean day into a separate hospital pen improves the likelihood that they will succeed. 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 part of your feeding program.
- Following the feed budget is key so that smalls pigs do not get skipped or shorted of an early-stage feed while the general population of pigs consumes this diet. Powerstart® Solo eliminates the need for this by providing a single diet for 13–25-lb. pigs.
- The normal stocking density and feeder space parameters still apply.
- Keep gruel pans near the waterer or feeder and away from the sleeping area to ensure that pigs stay dry.
- Wash and clean gruel pans in the alleyway to ensure that the 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.

Pen Walking

Pens should be walked daily, and the person who does the walking should:

- Look in each feeder to ensure that the feeder has the proper amount of feed and that it is clean.
- Look in the trough of each feeder to ensure that the feeder is adjusted correctly and that there is the correct amount of pan coverage.
- Inspect the floor of the pens for excessive wetness, manure accumulation 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 and head to toe; the rule of thumb is to spend two seconds looking 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 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, as they tend to be a challenge all the way through to marketing. One of the

most common challenges in hard-starting weaned pigs is identifying sick pigs vs. starve-out pigs. Medications are beneficial for 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 pig individually every day. Identify and treat sick pigs at the direction of your veterinarian. The first 14 days post-weaning are a crucial time to identify any pigs that are not transitioning well and are more susceptible to health and performance challenges.

- **Respiratory diseases**
 - Pigs may exhibit coughing, thumping, open-mouthed breathing or depression
- **Scours**
 - Pigs may have loose stool, inflamed rectums or feces staining their 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 heads, walk in circles or be down-paddling

Identifying Fallback Pigs

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

- **Lethargic or depressed looking**
 - Head will be down or droopy
 - Hair coat may have a rough or fuzzy appearance
- **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 the abdomen is full, with plenty of resistance, feed intake is adequate

Interventions for Sick or Fallback Pigs

- **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 head or utilize a PVC trough, allowing for 3 inches of feed space per pig. For example, a 45-head pen requires a 5½-ft. canoe made from a 4–6-inch PVC tube per pen, the PVC tube should have a diameter of 4–6 inches.
 - The recipe for gruel feeding (per 15 pigs):
 - 24 oz. of water and ½ lb. of feed
 - Gruel feeding should be applied four times per day for maximum results.

- o Gruel feed is properly calibrated when the pigs consume the entire mixture within the hour.
- o 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.
- o Gruel-feed within intensive-care pens for 7 days.

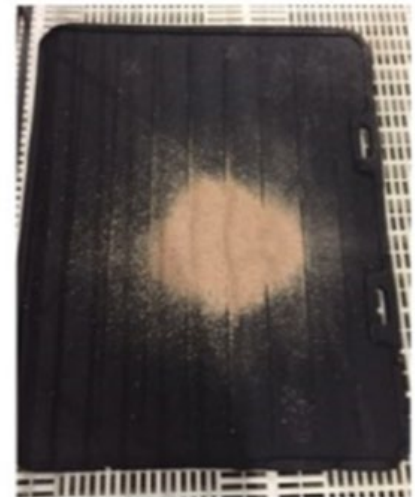
As intensive-care pigs recover and continue to improve their body condition, an evaluation should be made three times per week. Recovered pigs should be moved to a graduation area free of gruel feeding.

Examples of gruel feeders



- **Mat feeding**

- o The goal of mat feeding is to stimulate the activity level of the pigs and to act as a “dinner bell” prompting them to eat.
- o The transition from a sow’s 20 to 24 lactation events per day to an *ad libitum* environment sometimes challenges piglet feed intake.
- o Consider mat feeding for a minimum of 7 days post-weaning.
- o Schedule mat feeding so it takes place:
 - At the beginning of morning chores
 - At the conclusion of morning chores
 - At noon
 - During evening chores



Animal Care Summary

- Make sure you allocate the proper amount of time in your daily routine to accomplish all of the tasks involved in pig care. Walking pens to evaluate the pigs and equipment requires 1½–2 hours per 1,200 head.
 - o Workers should be equipped with the tools that support efficient care, including:
 - Syringes, medication and needles
 - Marking devices (aerosol or paint sticks)
 - A pen and notebook
 - A hydrometer and thermometer (to check humidity and temperature)
 - Potentially, a panel (or sorting board) to sort ill or injured pigs

- Evaluations should include the following steps:
 - o Identify any ill or injured pigs to treat or remove to a hospital pen
 - o Determine whether any adjustments need to be made to produce the proper water flow and feed pan coverage
 - o Take note of the daily water consumption and temperature variations (both the highs and lows)
 - o Evaluate the humidity and airspeed to determine any necessary modifications to the ventilation strategy
 - o Take note of the number of pigs treated, as well as any associated medications and dosages
 - o Evaluate the feed inventory and associated intakes to predict upcoming feed orders
 - o Ensure that the fans and heaters are appropriately functioning to produce optimal environments
- Evaluate the data daily to understand trends or patterns relating to:
 - o Water and feed intake
 - o Health changes
 - o Utility use (e.g., liquid propane levels, heater run times, temperature probes)
 - o Biosecurity and the cleanliness of mortality disposal equipment or compost management
- Every month, evaluate/test/do maintenance on the following:
 - o Emergency devices
 - o Curtain drops
 - o Alarms
 - o Back-up heaters and fans
 - o Generators, if available
 - o Equipment, probes, fan belts, curtains, inlets