

## MANAGING WEANED PIGS

When economic and management factors require clients to wean pigs as young as 7 to 10 days, the art and science of nursery management must be fine-tuned. Producers need to know the environmental, health, nutritional and management factors that allow them to wean very young pigs.

It's difficult to wean a very young pig that has a chronic, debilitating disease or is undersized. Only when specific disease and other problems are addressed in the farrowing house and the gestation barn can it be successful.

### Building design

Pigs at 7 to 10 days old can be weaned into a variety of facility types, including single-stage nurseries that take a 10-day old pig to 80 pounds, or a hot nursery where they spend two to four weeks, then are moved to a cold nursery.

The hot nursery can consist of a flat floor, or it can contain two-, three-, or four-high multi-level decks. Whatever building type, it must match the pig flow to allow all-in/all-out production. Generally, concrete is not suitable for flooring. Popular flooring includes tri-bar, woven wire, coated wire or plastic floors.

With floors that conduct heat rapidly (tri-bar and woven wire), a heat pad or comfort board (with or without a heat lamp) will provide a warm, draft free place for pigs to lay.

### Water delivery

Water delivery systems should include nipple waterers, which are easy for young pigs to use. Nipples should be shoulder height for the pigs.

Keep the plumbing system clean. If medication or electrolytes are used routinely, remove the nipples periodically and examine the inside of the water pipes to see if any buildup is occurring. This buildup may cause distasteful water.

### Ventilation

The ventilation system is extremely important for providing a warm, draft-free environment. Ventilation rates may need to be as low as 1/2 cubic foot per minute (cfm) per pig.

A popular method for ventilation nursery rooms with decks is to install a plenum or PVC tube under the full length of the decks to exhaust the air, and a plenum or PVC tube above the decks to bring preheated air in from the hallway.

Nursery rooms that have counter-weighted baffles in the ceiling also can be used successfully to wean very young pigs, without preheating the air. In this case, comfort boards and heat lamps are used for the first one to two weeks after the pigs enter the room.

One of the most common errors in nursery rooms with push/pull ventilation systems is to exit air through the push PVC tube at a velocity that causes drafts. This problem can be eliminated by unplugging the push fan for most of the year and using it only in the summer when increased cfm's are necessary.

The room temperature at which the newly weaned pig enters the room can vary from 70 F to 90 F, depending on the microenvironment provided in each pen. In many deck rooms with heat pads kept at 95 F, the room temperature can be 70-75 F.

In a flat nursery with pigs housed on cold flooring, such as tri-bar or woven wire with no comfort pads, room temperatures may need to be kept at 95-100 F. The first 48 hours are the most critical for preventing cold stress in early weaned pigs.

Observation of pigs' sleeping behavior is a good indication of their preferable temperature. Windows in the doors of the nursery make observation possible without entering the room and disturbing the pigs.

High-low temperatures should be recorded each day in each room of the nursery. Temperature variations should not be more than 4 F. Use the temperatures recorded on the thermometers, not the temperatures on the thermostats, to determine the correct temperature for the pig.

### **General management**

Nursery rooms should be cleaned and disinfected between every group. This means that all-in/all-out management is preferable, if not mandatory.

Young pigs can be weaned by litter, by size, or by bottom-sorting small pigs, as long as fewer than 15 pigs are put in each pen.

Before pigs are put in the room, the room should be dry and at the correct temperature. If heat pads or heat lamps are used, turn them on a couple of hours before the early weaned pigs enter the room. If heat pads or comfort boards are not used, it may take 24 hours to bring the flooring to the preferred temperature.

### **Health status**

Early weaning becomes easier as the health status of the weaned pig increases. Modified medicated early weaning (MMEW) is one tool that can greatly enhance the capability to wean early. Pre-weaning antibiotic injection programs, followed by post-weaning water medication, decreases post-weaning lag in many cases.

Delivering water medications under low-flow rates, which is common in nurseries, can be very unpredictable when using standard proportional type medicators.

A water-holding tank, in combination with pump and pressure tank, is a more reliable way to deliver medication.

A complete water analysis should be conducted, including bacteriology. Chlorination may be beneficial, even if bacteriology results do not indicate it is necessary.

Chlorine pellets can be added to the water tank for water medication, thus providing chlorinated water while the pigs are on medication. Other parameters, such as nitrates and sulfates, that are outside acceptable limits should be corrected.

### **Feeder design**

Feeders should accommodate 10-15 pigs, with one feeding hole per pig. If one hole per pig cannot be provided, feed can be delivered to the newly weaned pig for the first 5-7 days on the comfort board or the heat pad.

The feeder holes should allow easy access to feed. Soiled feed can be removed from tip-out style feeders much more readily than stationary feeders.

### **Feeding**

Feeding the early weaned pig requires the right feed and correct feeding management. Pigs should not be fed for at least eight to 12 hours after weaning. Then, small amounts of feed should be delivered four to eight times per day.

Feed should be consumed within approximately 15 minutes. Remove all soiled or stale feed before the next feeding. A very small scoop, about the size of a tuna can, should be used to ensure the small quantities are fed. Keep feed bags out of the nursery rooms to prevent them from absorbing odors in the room.

High quality pellets are preferred over grind and mix feed. Starter pellets produced by feed suppliers who have experience in feeding pigs as young as 7 days old are the best. Some of the better pellets may cost more than 50 cents per pound, so it is imperative that the amount being fed be kept to a

minimum. A common mistake, which greatly affects the economics of early weaning, is feeding expensive starter diets for too long.

At times, it seems that managing the early weaned pig still is more art than science. But as we continue to learn more about the biological needs of the early weaned pig, we can replace more of the art with science.