factsheet
Pork Information Gateway

Identification and Prevention of the Sick or Compromised Nursery Pig

Authors: Madonna Gemus-Benjamin & Scott Kramer, Department of Large Animal Clinical Sciences Michigan State University College of Veterinary Medicine; Alastair Bratton, Verus Health Alliance, Calgary, Canada

Reviewers: Ed Pajor, University of Calgary Faculty of Veterinary Medicine, Department of Production Animal Health; Mary Battrell, Murphy Brown LLC, North Carolina

Introduction

The objective of this initial fact sheet in the series, *The Identification, Welfare, and Implications of Conditions Affecting Compromised Pigs for Producers and Stockpersons,* is to detail short descriptions of the practical ways to evaluate individual or groups of pigs. This fact sheet will help the stockperson identify both healthy and compromised pigs.

A compromised animal, in biological terms, refers to an animal which is unable to function optimally. Observing pigs daily, by walking the pens will contribute to early identification of compromised pigs (1,2). In order to identify sick pigs, it is important to know what a normal, healthy group of pigs should look like. This fact sheet provides illustrations and a system, to be used as a tool, for assessing nursery pigs. This tool systematically assesses the body, eyes/ears/nose, skin/hair, and temperament which can easily be remembered by the acronym B.E.S.T.

B-body, **E**-eyes/ears/nose, **S**-skin/hair, **T**-temperament

Managing the compromised nursery pig requires not only individual attention but also an awareness of a group scenario and calls for timely decisions in respect to treatment, transportation or euthanasia (3). Initially, try to assess a group of pigs from a distance before disturbing them (Figure 1), observe the pigs so that they are unaware of your presence and maintain their behavior patterns. This may involve opening the door slightly. Listen for coughing, sneezing and sounds of restlessness.

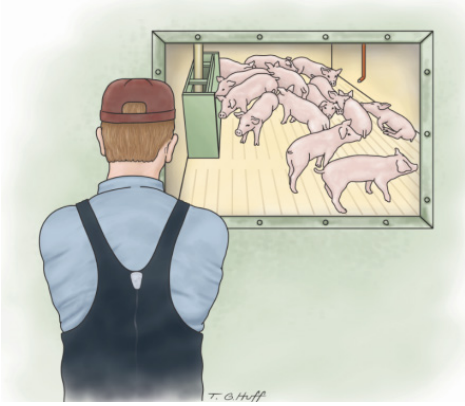

Figure 1 Observing pigs from a distance will allow for an undisturbed evaluation of their behavior. You should examine the pen in a consistent pattern, taking note of pig placement, behavior and the overall health of the pen.

After having made an initial assessment of the animals, enter all areas quietly with slow smooth motions. Once you have entered the building or room, scan the pens for (4, 5):

- down or lame animals,
- huddling,
- increased activity or inactivity at waterers (Figure 2a.),
- increased activity or inactivity at feeders (Figure 2b.),
- inactivity, as seen with downer animals
- and ventilation concerns such as drafts or condensation.

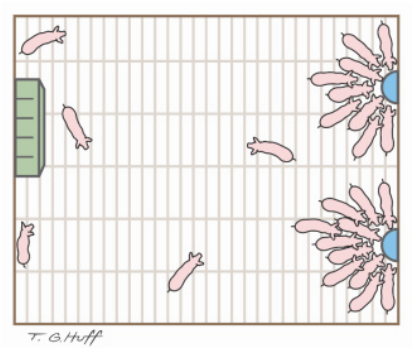

Figure 2a An increase of activity, piglets piling up at the water source may indicate faulty equipment. Increased vocalization may be another indicator of inadequate water supply.

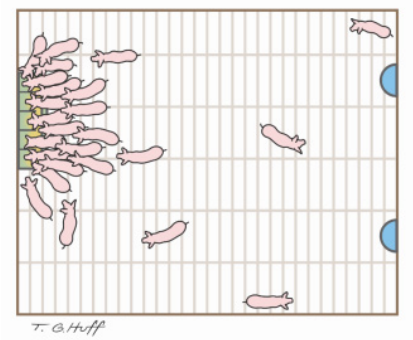

Figure 2b An increase of activity at feeders may indicate inoperable or blocked feeders as piglets cluster to access feed.

You should follow a consistent pattern of observation on a daily basis setting a reference point from which you can make accurate comparisons. The B.E.S.T. system described below is a tool for conducting an assessment of an individual or group of pigs every day on the farm.

The B.E.S.T. Approach

Body

Consistent, systematic observation of body condition and conformation should be made from nose to tail (Figure 3). Nursery pigs should "bloom"- as in they should be in good condition and sound. The spine, hips and ribs should not be visible on the pig and should be sufficiently fleshy covered. The only bones that should be somewhat apparent are the shoulder blades. The top-line should be level and not arched (6) (Figure 4). An arched back may be a sign of pain or skeletal deformity. Similarly, joint alignment in the feet and legs is important considering that conformation can affect the function and structure of the pig. The belly should appear well fed and free of unusual swellings (6). On the contrary, a gaunt pig with sunken flanks may be experiencing malnutrition, parasites or other maladies (Figure 4).

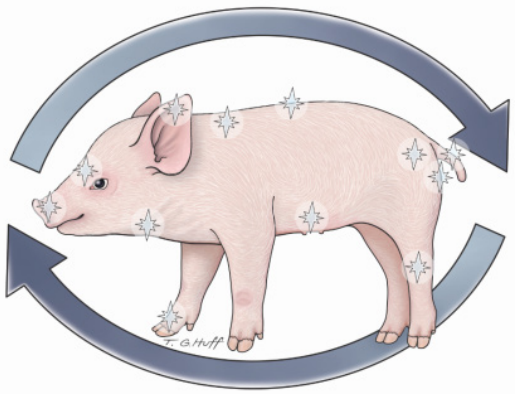

Figure 3 Use a consistent method of observation for each piglet. Starting at the nose and moving in a clock-wise direction on each side taking note of any abnormalities. Healthy pigs should appear fleshy and vibrant. This assessment takes 1-3 seconds per pig, which means that in a 2,000 head barn, depending on health status, an average of 30 to 100 minutes would be spent.

When evaluating the head or neck, they should be free from swelling or an tilting of the head. Joints and feet should be free of inflammation or wounds and appear taut and slender (Figure 4). Observe the hairline at the top of the hoof- wall for any signs of blisters or ulcerations (7).

Open sores, cracks or sole and hoof lesions are painful and can lead to infection and more complicated health problems. These injuries often contribute to a reluctance to move (8). Additionally, the animal should not show any signs of lameness. Signs of lameness may include a stiff or shortened stride, hind-end swagger, reduced weight bearing on affected limbs, unwillingness to rise or walk, or trembling (9). Pigs should breathe normally. Pigs that mouth-breathe, show signs of labored breathing, dog-sitting, sneezing, coughing (including thumping) or wheezing are potentially compromised (10). These signs may indicate respiratory disease (infectious or non-infectious) or irritation caused by poor air quality.

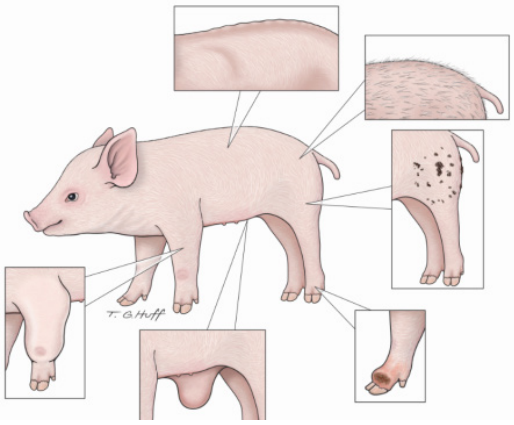

Figure 4 Compromised animals are thin with a rough or greasy hair coat. Lesions or skin irritations may indicate more complex problems. Hernias, joint swelling etc., should also be noted during your observation.

The rump should be free of damage or wounds and relatively clean without signs of scouring which may be associated with infectious disease, parasites or malnutrition. Pigs should have well-formed feces and be free of diarrhea (11). Also observe pigs for tail biting or open lesions at the base of the tail, generally caused by tail biting.

Eyes, ears and nose

Healthy pigs should have bright, open eyes with pink eyelids. Pigs with dull, sunken, cloudy, twitching, or irritated eyes are not normal. Excessive redness, inflammation, white or yellow (purulent) discharge, loss of hair, or lack of color around the eye may indicate a sick animal (Figure 5). Purulent discharge in the tear ducts is commonly seen in cases of respiratory disease resulting in dark stain generated from the tear duct.

Pigs' ears are normally alert and pointed (Figure 5) except in certain breeds such as Landrace. Ears should be devoid of any swellings, parasites or injuries. Swollen ears may be due to a hematoma, fighting, or injury due to the environment such as abrasive penning. The nose should be straight without deviation left or right, cool and moist without lesions or blisters (Figure 5).

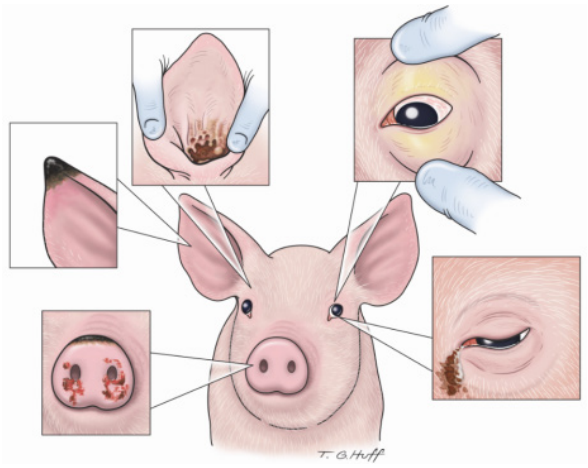

Figure 5. Lesions, bruising or necrosis on the nose or ears are not considered to be characteristic of a healthy pig. Ears should be relatively clean and free of accumulation of debris. Eyes should be open and free of discharge.

Skin and hair

A pig's skin and hair should be smooth, clean, flat and uniform (Figure 4). Fuzzy hair coat, lumps, bumps, sores, scaly skin, bald patches, or a rough, dull uneven coat and reddened skin may have developed from parasites, infection, fighting or nutritional deficiency (12).

Typically fight lesions will show parallel lines at the head and neck or near the rump, while lesions from flank biting are generally round and located around the flank. Skin irritation and scratching may eventually lead to either raised areas of the skin or cracks, which may be susceptible to bacterial infection. Heavy scales or crust may be a sign of mange. Ulceration or open wounds on the skin of the legs may be evidence of excessive wear of joints often seen in piglets that were in competition for a functional teat on the sow. Raised skin lesions, a greasy-appearance, or bruising is also abnormal.

Temperament

Pigs by nature are naturally inquisitive, even when excited, their behavior may reflect the quality of care they are receiving (13). The tail, should be alert and upright without damage indicating a positive well-being. They should be responsive to their environment -nose in the air and curious. Healthy pigs should not be dull, depressed, apathetic or inappetant. When approached, they should respond to your presence with a vocalized "woof" and then move away as you enter their flight-zone. However, due to their inquisitive nature, they should return shortly to investigate. You can expect the pigs to observe you (Figure 6), if they are not observing you or interested in you, try to determine the reason.

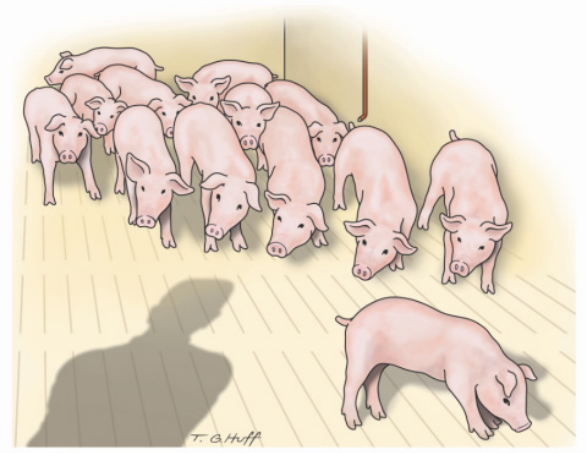

Figure 6. The pigs will usually be as interested in you as you are in observing them. You may notice that sick pigs, while not always the smallest in the pen, may be separated from the group, uninterested, head held low or generally dull in appearance.

Other behaviors such as belly nosing, tail and ear biting may be signs that there is a lack of environmental enrichment, crowding or poor air quality (14-15). Pigs that are prostrate and paddling, shaking, or lack of balance (ataxia) may require immediate care.

Environmental temperature is critical when raising nursery pigs. A warm place should be provided, not only for welfare, but also to avoid disease. Lower temperature and drafts can lead to chilled pigs, which often pile in a corner of the pen. Using means such as sprinkler and fan speeds to mitigate excessive heat can improve growth and feed intake.

Summary

We hope that identification of healthy nursery pigs using the B.E.S.T. assessment tool will help stockpersons to make better decisions when observing either an individual or group of animals, which helps to prevent animal loss. Once compromised animals are identified, it is suggested that the stockperson follow up with their herd veterinarian or manager for specific treatment protocols.

It is important that compromised pigs are identified and treated appropriately to improve their health, welfare, reduce their suffering and increase their chances of recovery (1). While not always pleasant, or easy, responsible care of pigs requires appropriate, timely decisions to be made about treatment, culling, and euthanasia of compromised animals (1). Stockpersons should work with their herd veterinarians to create and implement specific on-farm plans and protocols. We will address the issues and decisions around euthanasia in *Fact Sheet 2: B.E.S.T Welfare and Decisions of Pig Euthanasia.*

Resources

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