Pork Industry Handbook Slaughter Checks – An Aid to Better Herd Health
Michigan State University
Cooperative Extension Service
Robert E. Hall, University of Wisconsin, LeRoy Biehl, University of Illinois, Kenneth Meyer, Purdue University
July 1984
2 pages

pork industry handbook

COOPERATIVE EXTENSION SERVICE • MICHIGAN STATE UNIVERSITY

Slaughter Checks—An Aid to Better Herd Health

Authors
Robert E. Hall, University of Wisconsin
LeRoy Biehl, University of Illinois
Kenneth Meyer, Purdue University

Reviewers
Norman P. Kendall, Canandaigua, New York
Richard Nash, Sharpsville, Indiana
Norman Underdahl, University of Nebraska
Willard L. Upchurch, Crossville, Tennessee
Diane Wallin, Milnor, North Dakota

Every pork producer needs a herd health program. This program should be determined by continuous monitoring of the health and production records necessary for efficient herd management. The producer, his veterinarian, and other professional advisors should update the program at least once a year.

A good herd health program includes a veterinarian to make on-farm inspections, conduct blood tests and other diagnostic procedures, examine cull breeding stock and market hogs at slaughter, evaluate production records, counsel, and make written recommendations to the management team producing pork.

An important resource, often overlooked but providing important health information, is animals sold for slaughter.

Purposes

The purposes of a slaughter test are to (1) look for abnormal tissues so that specific problems can be identified and (2) monitor the effect of drug use, vaccination programs, or management changes. With this information the producer can work toward eliminating or controlling disease problems. A slaughter check reveals disease information about your herd that may not be found during a farm visit or an occasional necropsy.

Respiratory Diseases

Chronic respiratory diseases in swine are common on many farms (Figure 1). Monitoring the lungs of a group of slaughter hogs gives better information on the extent of the lung damage and possible causes. For example, some hogs may go to market looking healthy but be infected with mycoplasma, pasteurella, bordetella, hemophilus, lungworms, or migrating roundworm larvae, all of which can cause lung damage. The probable cause, extent of the lesions, and the number of pigs with lesions can be correlated with days to slaughter and feed efficiency records to form a plan for drug treatment, vaccination, or change in environment.

Atrophic Rhinitis

The severity of atrophic rhinitis (AR) can be determined by sawing across the snout and measuring the turbinate damage (Figure 2). This examination is the most accurate way to determine if AR is present in a herd. Only a small percentage of AR can be detected by visual observation in the live animal. Routine slaughter exams can be used to monitor any improvement from a vaccination program or a change in facilities or management.

Worm Control

The need to deworm, and the success of a deworming program, can be monitored by slaughter examination. The most common worm of swine is the large roundworm (Ascarid). In the hog, part of the life cycles of roundworm and kidneyworm involve migration through the liver. The number of white spots in the liver is an indication of the

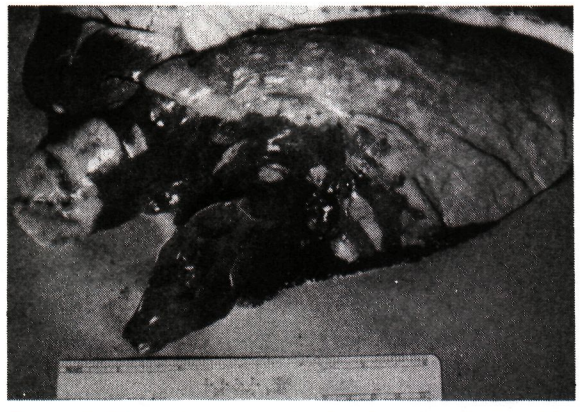

Figure 1. Chronic pneumonia due to mycoplasma. The dark-colored areas in the lung are diseased.

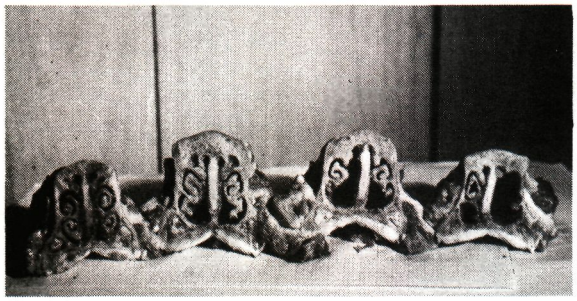

Figure 2. Atrophic rhinitis. The cross section of the nose on the left is normal. The three on the right show various degrees of atrophic rhinitis. Note the condition of the cartilage separating the two sides of each nose, and the amount of destruction of the turbinates.

roundworm or kidneyworm problem in the herd, and of the effectiveness of the deworming program. In some confinement operations slaughter check monitoring may be a better alternative than routine deworming.

Reproduction Problems

The slaughter examination also can be used to gather information concerning reproductive problems in the herd. The causes of some cases of reproductive failure may be determined by examining the ovaries and uterus.

Other Problems

In addition to lung, nose, liver, and reproductive lesions, other problems can be uncovered. Occasionally, carcasses exhibit lymph nodes with abscesses caused by streptococcus or mycobacteria (TB). Mange and the mild skin form of erysipelas can be easily observed in dehaired hogs.

Slaughter Test Procedures

Once the decision has been made to conduct slaughter checks, the producer or veterinarian should contact the packing plant so that arrangements can be made for delivery time, date, and method of identification. In some instances a slap tattoo may need to be applied at the farm before shipment. To maintain identification of the pigs, the trucker needs to inform the buyer that a slaughter check is to be done when he delivers hogs to the plant. An alternative to a packing plant is a local plant used for home slaughter. Even though sufficient numbers may not always be accommodated, valuable information can still be obtained from the two or three pigs that may be slaughtered at a local plant for home use.

A commercial producer should have at least two slaughter exams per year, one in fall-winter and the other in spring-summer. A seed stock producer should have slaughter tests made on a more frequent schedule, such as every quarter or for each farrowing group.

The number of animals to be examined depends upon the size of the herd and the incidence of the specific disease in the herd. For example, on the basis of a 40 percent infection with pneumonia only seven pigs would be required to find at least one pig with lesions, according to a Nebraska report. Based on this generalization, a minimum of 8 and a maximum of 12 should be selected from the market hogs for the slaughter examination.

Additional slaughter test information to be used in your herd health program can be obtained from the federal or state meat inspector's reports on condemnations of parts of the carcass, such as abscesses, enlarged joints (arthritis) or adhesions found in the lungs or abdominal cavity.

It is important to check fast-growing pigs as well as those doing poorly. This will give a better overview of herd health. If a choice has to be made between the two, the slow-growing pigs may reveal more evidence of chronic disease problems.

The cost of slaughter exams can be reduced if two or three producers arrange for a slaughter check on the same day. The veterinarian's fee usually will be either on an hourly or on a per head basis and should be agreed upon before the slaughter check is conducted. The producer should insist on a written report (Table 1) from the veterinarian documenting the findings. Some veterinarians add additional columns and grade the severity of the abnormal parts found in each pig tissue or organ examined. Once the slaughter check information is obtained, the producer and veterinarian can begin to implement a sound health program for the herd.

Contact your state veterinarian or your University's Extension veterinarian for information on slaughter plants that cooperate in providing this service.

Table 1. Example of a Slaughter Test Report.

Date

Farm

Address

Phone no.

No. examined _____

Market hogs _____ Breeding stock _____

	Number	Number
Nose, turbinate	normal _____	abnormal _____
Nose, septum	normal _____	abnormal _____
Lungs	normal _____	abnormal _____
Heart	normal _____	abnormal _____
Liver	normal _____	abnormal _____
Intestines	normal _____	abnormal _____
Reproductive tract	normal _____	abnormal _____
Other conditions observed:		
Abscesses	yes _____	no _____
Mycobacteria	yes _____	no _____
Mange	yes _____	no _____
Arthritis	yes _____	no _____
List others		

Comments/Recommendations

_____
Examining Veterinarian

NEW 1/84

MICHIGAN STATE UNIVERSITY
COOPERATIVE EXTENSION SERVICE

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

7:84-3.5M-New-TCM-UP. Price 15 cents, single copy free to Michigan residents.

O-14959