

Swine Sanitation

DEC 14 1979

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Sanitation is important to any swine production program but *vital* to an intensified program. If sanitation could be measured, the degree of success of the production program would be in direct proportion to degree of sanitation.

Cleanliness and sanitation are commonly used as synonyms, but cleanliness is far from the entire picture of sanitation. It should include the entire management program directed toward the prevention and control of disease for the purpose of efficient swine production.

The selection of lots and pastures, and the construction of houses and feeding floors should be directed toward easy and effective cleaning, ample drainage, and the provisions of a clean wholesome water supply. Pens and feeding floors should be preferably of an impervious material, such as concrete to facilitate proper cleaning.

DISINFECTION

Disinfection should be attempted only after thorough cleaning is complete. Manure and bedding, as well as feed and soil, reduce the effectiveness of most disinfectants, and provide physical protection for disease-causing organisms against all disinfectants.

After the removal of organic material, scrub all surfaces with soapy water and brushes or brooms until they appear clean. Soap itself is an organic material and should be rinsed with clear water. Only after this is completed should you use disinfectants.

Heat improves the effectiveness of most chemicals used for disinfection; therefore, it is not advisable to use these products when the temperature is below freezing. The agents commonly used require more than momentary contact with germs. Solutions of Cresylic acid, highly recommended as a disinfectant by the U.S. Department of Agriculture, requires three to four minutes contact with bacteria. Choose a noncaustic chemical and permit it to dry on the cleaned surfaces.

Pen cleaning should be systematic, moving from youngest pigs to oldest pigs. Younger animals generally have less developed resistance to disease. An infection which is mild or inapparent in older groups or litters could be very serious in baby pigs. Special care should be taken to avoid contamination between lots and age groups. As



Dry, clean, and well-ventilated quarters make contented hogs.

far as possible each pen or house should have its own cleaning equipment, and equipment should never be transferred to other groups without thorough cleaning and disinfection.

Adequate draft-free ventilation and light are included in sanitary management. Many respiratory conditions may be held to a minimum by an ample supply of fresh air and sufficient natural or artificial light. It should be emphasized that disease-causing bacteria and viruses thrive better in damp, dark, poorly ventilated areas than they do in airy, bright surroundings.

Good concrete floors discourage rats and mice, and are easily cleaned. The feed consumed by rodents can never become pork.

Lice and mange can reduce the efficiency of swine production. They provide a constant source of irritation plus the fact that they receive their nourishment from the hog's body. Both rodents and ecto-parasites (skin parasites) also can be carriers of disease either as mechanical, transient, or permanent vectors.

INTERNAL PARASITES

Internal parasites—worms—are also controlled under a good sanitation program. They can be satisfactorily controlled by periodic worming, breaking the life cycle of the worm, or by the use of feed additives designed for this purpose. Many species require intermediate hosts such as the earthworm to complete their life cycle before becoming infective to swine. Some hog worms are believed to be, themselves, intermediate hosts and carriers for various viruses and bacterial diseases. Infected animals continually pass worm eggs in their manure providing a source of infection to susceptible animals. Sows should be routinely wormed soon after breeding.

DISEASE CONTROL

Disease control programs should be carefully planned and rigidly followed. Consult local practicing veterinarians in development of immunization programs. They are best qualified to fit programs to a particular operation in any locality.

Consider Erysipelas and leptospirosis vaccinations. Employ revaccination or "booster vaccination" of all breeding stock to guarantee strong immunity and protection for the operator's investment.

Choose replacement animals carefully with respect

to disease. It is impossible to recognize "carrier animals" in most cases. Laboratory tests will identify brucellosis and leptospirosis, but they are only two of the many diseases that can be introduced to herds by carrier animals. The past history of disease in the herd of origin should always be investigated. Disease such as atrophic rhinitis, enteritis, brucellosis, leptospirosis, virus pneumonia, jowel abscesses, and possibly erysipelas have been introduced into herds by "carrier" or inapparently infected replacements.

Extreme vigilance is necessary to recognize disease early, and the operator will have to rely upon competent veterinary service to protect himself. Sanitation is not the entire answer to disease control, but it is very important. The degree of sanitation that is practical on one farm may not be satisfactory on another farm. As complete a sanitation program as possible must be followed in all cases.

Much research is being done and much is still to be done regarding disease control. Many new problems will be encountered, and many existing problems will be solved as newer and better methods are developed. However, at the present time, disease need not be a limiting factor in any size swine operation. The application of sound proved practices and good judgment by the swine raiser coupled with veterinary supervision will result in efficient, disease-controlled swine production.

