Four common causes of lameness in swine are: Infectious arthritis, nutritional deficiencies or imbalances, trauma or injury, and genetic. The economic impact of lameness in a given herd can vary from minor to severe.

Most of the arthritis that occurs in swine is caused by bacterial infections. The usual signs of infectious arthritis are lameness and swollen joints.

Four infectious bacteria commonly are involved in swine arthritis: The streptococcus species, erysipelas, mycoplasma (formerly PPLO), and Corynebacterium pyogenes.

Strep arthritis, sometimes called navel ill, occurs from birth to 3 weeks of age. It is caused by navel infections or breaks in the skin. Prevention includes cleanliness and strict sanitation in the farrowing house.

Erysipelas is caused by the bacterium Erysipelothrix rhusiopathiae. Erysipelas arthritis affects pigs from 3 weeks old through adulthood. Anti-erysipelas serum and penicillin are the treatments of choice and must be given early. Sows should be vaccinated 3 weeks before farrowing and pigs when about 6 to 8 weeks old. It may be necessary to repeat the vaccination on problem farms when pigs are 100 to 125 lbs.

Mycoplasmal Arthritis.
This arthritis is caused by two species of mycoplasma. M. hyorhinis affects 3 to 10 week old pigs and adult swine, while M. hyosynoviae affects 10 to 20 week old swine and adults.

Clinical signs of M. hyorhinus are abdominal pain and
labored breathing, a temperature of 104° to 107° F, inflamed testicles, arthritis and lameness. In severe cases the pig is unable to arise and there is evidence of severe pain.

Clinical signs of *M. hyosynoviae* are sudden onset of lameness and little joint swelling. Hocks may show "puffiness". The acute stage lasts 3 to 10 days. Affected animals may pick up the affected leg, indicating severe pain. Adult pigs may be unable to stand.

Injectable tylosin or lincomycin should be injected during the first 24 hours of the acute stage and repeated daily for 3 days. An injection of a corticosteroid may be given once at the time of the first treatment to reduce pain. Oral lincomycin may be a useful treatment.

**Nutritional Lameness.**
The major cause is calcium-phosphorus imbalances or deficiencies which were discussed earlier—in the second chapter, on nutrition, in this section.

**Lameness Due to Injuries.** A good deal of lameness...
is caused by injuries to the feet and legs. This is especially true in confinement-reared swine where rough floors or defective slatted floors take their toll.

*Osteochondrosis*, a lameness in rapidly growing pigs that are 5 to 8 months old, is fairly common. To control it, avoid selecting replacement boars and gilts that have the conformation related to osteochondrosis.

**Genetic Defects**

Congenital defects are those present at birth in animals. The most common in swine are:

- **Anal atresia**, the lack of an opening from the rectum. This defect occurs in both males and females but is more common in the male, and is perhaps the most common defect observed in swine.

  If the blind intestine is just beneath the skin, it may be possible for a veterinarian to surgically repair the defect. Most are not repairable, with the pig dying at 2 to 3 weeks of age.

- **Splay legs**, paralysis of the hind legs. This genetic defect is more common in certain strains or breeds.

  Pigs with milder signs of splay legs can be saved by taping the legs together with wide adhesive tape applied in the form of a figure 8 around the outside of one hind leg, crossed between the hind legs and then around the opposite hind leg so as not to cut off the blood circulation to the lower legs.

- **Scrotal hernias**, ruptures into the scrotum. This defect should be guarded against at the time of castration. Pigs having the appearance of a large testicle, usually on the left side, should be castrated by a veterinarian who will be prepared to repair the hernia during the castration procedure.

- **Cryptorchidism**, failure of a testicle to descend into the scrotum. During development of the male pig before birth, one or both testicles may not descend from their original position in the abdominal cavity to the scrotum, resulting in a cryptorchid.

- **Inverted nipples**, nipples or teats which tend to be short and flat. The center of the teat is depressed, making it impossible to milk the sow. Prospective gilts or boars to be added to the main breeding herd should be examined for inverted nipples to prevent this defect from becoming established in a herd.

An attempt should be made to eliminate all genetic
defects. This is best done by identifying all litters in which one or more pigs have a defect. No animals should be selected for breeding that are from a litter with any of the listed genetic defects.

**Skin Diseases**

Many conditions can affect the skin of pigs. The more common of the skin problems are briefly described:

- **Sunburn.** White pigs are more severely affected. Sunburn is the result of moving pigs that were raised indoors to outside pens without providing shade.

- **Photosensitization** occurs in white breeds or the white skin of partially colored pigs. It results from exposure to sunlight and access to certain plants such as rape. In these animals, the white skin becomes red and begins to slough off. Photosensitization is prevented by removing exposure to sunlight and eliminating access to the offending plant.

- **Greasy Skin Disease** is caused by infection from staphylococcus species of bacteria. The skin becomes dry and scruffy, and a brownish black coating soon covers the affected areas of skin—which can include the entire body. Treatment is by antibiotic injections and dipping the piglets in certain disinfectants. Thorough cleaning and disinfection between groups of pigs also is required to control and prevent greasy pig disease.

- **Skin Erysipelas** is a form of erysipelas that differs from the acute and joint forms. It also is called "diamond skin disease" because of the diamond shape of the skin lesion. In later stages, the skin sloughs off in patches. Skin erysipelas can be prevented by vaccination.

- **Sarcoptic Mange** is caused by a very small (1/50th inch long) mite that burrows in the skin. Itching is intense, and affected pigs do a lot of rubbing and scratching. Small bumps can be observed on the belly of affected pigs. Later the skin becomes thickened and wrinkled. Treatment is by spraying or dipping with an approved insecticide solution.

- **Ringworm** is a fairly common skin disease caused by a fungus, *Microsporum nanum*. Lesions often start behind the ears of sows. Later, large wet areas that collect dirt appear on the sides and sometimes on the udder. Ringworm differs from mange in that the pigs don't seem to rub and scratch with ringworm. Treat with sulfurized mineral oil.