

## Gastrointestinal Diseases of Pigs: Diarrhoea Pre-Weaned Pig in Breeder Area

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**Keywords:** breeder, diarrhoea, gastrointestinal disease, pig.

### INTRODUCTION

All phases of pig raising are important, from the time of the womb, the prestarter, the starter, the grower, the finisher, the sires (sow), and the males (boar), all related to each other to produce maximum performance. However, the initial phase of pig breeding is indeed a phase most important.

In this phase, the state of the digestive tract is still relatively sterile from microorganisms, does not have a good body temperature regulation system, immune system is not functioning well so vulnerable to the presence of infectious diseases from outside in the initial phase, piglets tend to be environmentally sensitive and easy to stress.

The symptoms of diarrhoea (scours) at the time of pre-wean, weaning or change of feed is necessary to watch out for. In theory, diarrhea is a disease of gastrointestinal disease (enteritis) that attacks many piglets or young pigs, caused by several factors:

\*Non-infections, such as sudden weaning stress, weather changes (from summer to rainy season or vice versa), cage displacement, density, poor cage sanitation, starving and sudden change of feed in pigs to be weaned.

\*Infection, such as bacterial (colibacillosis), viral (coronavirus), or parasitic disease (coccidiosis).

At the time of weaning, piglet has a high risk of stress because it is psychologically separate from the mother. Stress increases as pigs also have to adapt to the environment and the type of feed from the normally wet becomes more complex and dry.

In addition, in the digestive tract, the piglet has changed the size of the surface of the small intestine villi to be shorter so that it affects the digestibility and absorption capacity of the feed. Another consequence is the presence of changes in the immune system and intestinal microflora so that if there is a beneficial bacterial imbalance, can cause the occurrence of diarrhea.

### CASE REPORT

The case of piglets diarrhoea in a farm with a population of 3600-4000 hds per months is

100 or 2.5% of the piglets population. The occurrence of diarrhoea events at 3 weekly ages when the breeder in which the mother is placed in the individual pen and begins to be handled at the age of 6 weekly while weaner (off wean).

Piglets affected by enteric colibacillosis show varying degrees of watery diarrhea before death or recovery (Taylor 1999). Affected piglets may still suck but often stand with drooping tails and appear shrunken, lose the bloom from their skin and have erect coat hairs. Loss of flesh is apparent, particularly over the hips and backbone. The diarrhoeic faeces may be extremely difficult to see on casual inspection as it is often pale, creamy yellow colour. Dried crust of diarrhoeic faeces may be seen on the thighs or perineum and there may also be scalding about the anus.

### DISCUSSION

The cases of diarrhoea are important in large-scale farms oriented to live pig exports because piglets that have diarrhoea can affect the weight of pigs that will be in weaning for the fattening process.

Outbreaks of diarrhoea occur in farrowing houses where successive litters, particularly those of gilts or newly purchased sows, may be affected. In some cases the morbidity may reach 70% of all piglets born. Seventy per cent of piglets affected with diarrhoea in the first few days of life may die (Taylor 1999). Mortality rates then decrease rapidly until less than 10% mortality occurs in affected pigs over 2 weeks of age. Piglets which are extremely dehydrated and which do not respond to treatment should be killed.

### CONCLUSION

To prevent that it is necessary to anticipate minimizing stress by making adjustments slowly and gradually to the piglet to be moved, both from the side of separation with the parent and feeding. Good management of pen management is not only done on sires (sow) but must also be applied to the piglet.

In terms of digestion, it is necessary to improve the gastrointestinal ecosystem so that the bacteria present in the intestines are beneficial,

balanced bacteria and can improve the immune function of pigs. The development of beneficial bacteria can be driven by acidization and the addition of beneficial lactic acid bacteria through feed or drinking water.

Acidation done with the addition of organic acids can lower the pH of the digestion so as to provide an ideal environment for the growth of beneficial bacteria. This is important because most bacteria cause diarrhea to grow at higher pH while beneficial lactic acid bacteria grow at low pH.

The administration of colostrum in the first life is very important because it can provide the first innate immunity to maintain from diarrhoea infections.

Increased digestibility can be done with the addition of enzymes and maintain the health status of livestock by minimizing stress. To prevent diarrhea needs to be done a comprehensive approach, so that one step improvement can cover it all.

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