Effect of Lameness in Pigs in Terms of “Five Freedoms”

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than a high-intensity pain for a short duration. However, at the herd level, both may have equal impacts. Thus, it is crucial to assess the severity of disease and associated pain as a function of duration, intensity, and prevalence. Assessing herd-level welfare impact of pain associated with diseases is restricted by poor recording systems and a lack of objective tools for pain measurement. Given the possibility of underestimating the herd-level impact of a compromised welfare based on individual-level assessment, it is essential to emphasize epidemiological evaluation of painful conditions.

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The concept of “five freedoms” is viewed as a tool to evaluate and represent nonhuman animal welfare. These freedoms are not mutually exclusive and differ in their extent of attainment at the farm level. At the herd level, the freedom from pain, injury, and disease may be the most complicated freedom. Painful conditions, such as lameness in pigs, are seldom mentioned as challenges to pig welfare, regardless of their high prevalence.

A disease such as lameness may affect all of the five freedoms. Lameness is often closely associated with pain, an important constituent of the five freedoms. Pain may persist for longer than the clinical signs and may not be visible due to hiding behavior. Inflammatory pain alters nociceptive information processing, leading to long-term adverse welfare consequences. Lameness can cause poor welfare and contribute to disease in a vicious cycle. A lame pig may not be able to move about and meet its feed and water requirements, taking away the freedom from hunger and thirst despite feed and water availability.

At the herd level, shelter and resting areas are provided, considering the normal healthy pig, and sick pens are often devoted to extreme cases only. The absence of a “gold standard” restricts diagnosis of lameness and evaluation of the effectiveness of therapeutic measures when practiced. Lameness also hinders an animal’s ability to perform normal behavior. Often, conspecifics increase
competition for resources and may aggravate the condition. The freedom from fear and distress is also violated when a pig becomes lame as the ability to demonstrate the survival instinct is physically restricted. Despite these obvious links between the effects of lameness and five freedoms, pig welfare is often determined on easily measurable, systematically applied terms such as space allowance.

A Tool for On-Farm Welfare Assessment of Pigs in New Zealand

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The New Zealand Pork Industry has the Code of Welfare 2005 (Pigs) as its primary welfare legislation. It is based on 20 minimum standards and has recommendations for the care of pigs. The minimum standards are primarily facilities based.

The objective of this project was to quantify nonhuman animal-based welfare outcomes by observing pigs, pig behavior, and good husbandry. The first stage was to identify welfare indicators to assess and quantify the on-farm welfare status of pigs. Second, a system (welfare assessment tool) had to be developed to interpret these indicators and link them through to the 20 minimum standards contained in the Code of Welfare 2005 (Pigs). In addition, the tool developed had to be a valid measure of pig health and welfare, accurate in providing a true reflection of the current welfare status, reliable and repeatable, robust and practical, clear and adaptable to allow use by a range of inspectors and production systems.

The welfare indicators were developed in consultation with parties of interest including pork producers; pork industry representatives; and technical staff, pig veterinarians, National Welfare Advisory Committee, and the Society for the Prevention of Cruelty. The tool developed had a series of primary animal-based indicators, including vocalization/noise, appearance (skin and body condi-