

# Guidelines for the development of On-Farm Biosecurity Standard

## 1. Stand Down Period

All persons, vehicles and equipment that enter a pig farm must have had no contact with pigs or pig facilities for at least 24 hours before they enter a pig farm. The same stand down period applies after contact with or visits to slaughter houses, diagnostic laboratories, and saleyards.

Develop procedures appropriate for your own farm with the assistance of your veterinarian for staff returning from overseas or international visitors who have had contact with pigs and / or other risk items.

## 2. Persons

Visitor access should be restricted to those persons with a need to visit, and must in all cases exclude persons who are sick, particularly with flu-like or diarrhoea-like symptoms.

Staff who are sick, particularly with flu-like or diarrhoea-like symptoms, or who have been in close contact with persons with such symptoms must not work with pigs or have contact with co-workers. It is recommended that farm workers and their family members are vaccinated annually for influenza.

In addition to a 24-hour stand down period, persons must have showered in the 24 hours before entering a pig farm.

For the purposes of this Standard, the loading point represents the point of entry to the piggery.

## 3. Cleaning and Disinfection

In addition to a 24-hour stand down period, all vehicles that have entered a piggery in the past must be washed before entering another pig farm. For the purposes of this Standard, a vehicle is considered to have entered a piggery if it comes within 10 m of the pigs or their housing. This Standard applies without exception to ALL vehicles including feed delivery, effluent removal, and vehicles of visiting farm advisers.

In addition to a 24-hour stand down period, all equipment that has been on a piggery in the past must be washed and disinfected before it is taken onto another pig farm.

All clothing and footwear that is worn onto a piggery must be clean. It is a very strong recommendation that the farm provides footwear and over-clothing, specifically for use by visitors. In the undesirable circumstance that the farm does not provide footwear and / or clothing, all footwear must be scrubbed clean and soaked in a registered disinfectant for 15 minutes prior to use, and all clothing should be freshly laundered.

## 4. Farm Security

The perimeter of the piggery should be fenced to minimise the likelihood of uninvited people or vehicles entering the property. There should be a single gated entry point into the premises with signage providing the contact details and phone number of the farm owner or manager. Similarly, whenever possible there should be only a single access into the pig buildings (or office complex). This single entry should provide ready access to an area for changing into farm-specific clothing, and hand-washing or showering facilities. A dedicated process and space should be identified for farmer interaction with visitors and delivery personnel.

## 5. Quarantine and Isolation

Every entry of new stock onto a piggery presents the risk of introducing a disease agent into the herd. It is imperative that farmers establish a facility, physically separated from the main farm, for use as a quarantine

and isolation station. New stock can be expected to remain in quarantine for at least three weeks before entry into the main herd. Develop procedures appropriate for your own farm with the assistance of your veterinarian.

## **6. Pig Semen**

A number of important bacterial and viral diseases can be introduced to a piggery through semen. Semen should only be obtained from reputable suppliers that have a documented herd health and biosecurity programme and are routinely visited by a swine specialist veterinarian.

## **7. Other Animals**

Contact between pigs and other animals, and access of other animals to pig areas should be prevented where possible. A rodent control programme should be in place for every farm. In addition to routine pest control, involvement of a professional exterminator on an annual basis is recommended.

Feral pigs present a particular risk of disease introduction onto outdoor piggeries and at least occasionally, feral pigs are known to access indoor pig facilities as well. A strategy to exclude contact between feral and farmed pigs should be developed in cooperation with the Department of Conservation, professional fencing contractors, and farm staff.

Cats are known to carry a parasitic disease called toxoplasmosis which can be spread to pigs when cats defecate into pig feeders. Cats are generally much less efficient in rodent control when compared to well-designed baiting programmes; their presence in piggeries should be avoided.

Birds are a potential vector of a number of pig pathogens including TB. Whenever possible their contact with pigs should be minimized by covering feeders, promptly cleaning up feed spills, and use of bird netting over windows and building openings, eliminating roosting sites in buildings, and reducing their numbers when permitted.

## **8. Feed**

All farms are expected to comply fully with New Zealand regulations related to feeding of food by-products and waste that may contain meat or have come into contact with meat. Animal proteins and food by-products can be used safely as feed ingredients by establishing clearly defined quality specifications with the supplier.

### **NOTE:**

Equivalent standards may be agreed on a case by case basis where the specific risk has been assessed and addressed by suitable biosecurity measure (e.g. feed supply). Many farms operate at a higher level of biosecurity and may have more stringent requirements that need to be followed.

No stand down period or cleaning and disinfection is required where contact was with pigs or their environment on the same farm.

Individual farmers may choose to consider herds on separate properties as being part of the same farm e.g. where the breeding and growing herds are on different sites.

# 10 Principles of Pig Farm Biosecurity

1. A distinct boundary must exist between “clean” and “dirty” areas of the farm. These boundaries may exist virtually or physically, and they must be readily identifiable.
2. Cleaning must precede disinfection. The effectiveness of all disinfectants is reduced considerably in the presence of organic matter.
3. Sterility is a myth; the objective of biosecurity is to reduce the pig’s level of exposure to a pathogen. Reducing the pig’s exposure is a function of both exposure time and pathogen density.
4. Unidirectional flow of both people and pigs is imperative. The direction of flow should be established to protect the downstream customer, AND the population least easily recovered from a disease introduction, AND the most disease-susceptible population, in that priority order.
5. Categorical descriptors of the health status of a farm (e.g., “high health,” “conventional health”) are meaningless. Considering farms to be of “comparable” or “compatible” health status is only marginally more useful. Ad hoc and routine submission of samples to a veterinary diagnostic laboratory is a required part of a Biosecurity Risk Management (BRM) plan.
6. Isolation and acclimatization procedures are mandatory prior to introduction of genetic stock into farms.
7. A herd’s health status is only as good as the last time it was tested. Imperfect diagnostic test sensitivity and specificity need to be considered when determining required sample sizes for establishing the disease status of a population.
8. Purchase of pigs or semen never comes with an absolute guarantee of their health status; health status of a population is not static. Disease risk can be managed, but not contractually obligated. Health status of all farms will decline over time.
9. Biosecurity planning should consider payoff schedules that inform one of the “cost-to-benefit ratio” of BRM processes and procedures.
10. Procedures that are established as part of a BRM plan are meant to be followed by everyone, especially veterinarians.

*Neumann and Hall, 2012*