



The aim of the zoonoses national control programme for Salmonella in pigs (ZNC_{Pig}) is to take action at every level in the chain from farm to fork to reduce the risk from Salmonella. This includes taking action on farm to reduce the risk of Salmonella circulating between pigs. Effective cleaning and disinfection is essential to break the cycle of Salmonella infection

Effective Cleaning and Disinfection for Salmonella control

It's time to raise the bar

For pigs, the biggest source of salmonella infection is other pigs and their muck.

A consistently high standard of cleaning and disinfection is one of the most important ways to break the on-farm cycle of reinfection with salmonella (and other infectious diseases).

This should be readily achievable but standards are often allowed to slip and bad habits creep in.

An updated and effective cleaning and disinfection regime should be an integral part of your salmonella action plan.

If a job is worth doing it's worth doing well and this couldn't be truer than for cleaning and disinfection (C&D) on your pig farm.

A bad C&D job could be causing more trouble than you know by:

- 👉 reducing health & performance
- 👉 spreading disease
- 👉 compromising food safety
- 👉 wasting valuable resources
- 👉 increasing the need for additional control measures
- 👉 reducing effectiveness of some other control measures
- 👉 allowing the build-up of muck, odour and infectious agents

A good C&D job will benefit you more than you think by:

- 👉 improving health & performance
- 👉 reducing the spread of disease
- 👉 reducing food safety risk
- 👉 making better use of resources
- 👉 reducing the need for additional control measures
- 👉 allowing other control measures to work better
- 👉 preventing the build-up of muck, odour and infectious agents

REMEMBER The payback from finding the right way to do a good job of cleaning and disinfection will always outweigh the cost of doing a bad one.

IT IS IMPORTANT TO REVIEW & UPDATE YOUR C&D PROTOCOL

Target your problem areas.

Here are some figures to give you an idea of where salmonella is likely to be lurking*: • dung on the pen floor (83%) • muck scraper (70%) • other equipment (62%) • hospital pens (59%) • passageways (49%) • farm environment (43%) • cleaned & disinfected pens (30%) • bird droppings (28%) • rodent faeces (19%)

* on-farm sites where salmonella has been most frequently isolated in VLA testing

First things first...

However good your facilities, staff and plans, the first step is to get a clear picture of what is actually happening with C&D on the farm. There's no point in changing things if you already have a good C&D plan, but it's just not being carried out properly.

Once you've assessed the situation take every step to make sure your C&D plan matches, on paper and in reality, what should be happening to effectively control salmonella.



Your Goal

To stop reinfesting pigs on your farm with Salmonella

to do it cost-effectively

Check list for cleaning and disinfection of pig units

| | | | | |
|-----------------------|-----------------------------------|---|---|--------------------------|
| PREPARATION | Check | depopulation date and prepare a C&D plan | <input type="checkbox"/> | |
| | | COSHH assessments | <input type="checkbox"/> | |
| | | rodent controls are effective | <input type="checkbox"/> | |
| | | list items for repair and maintenance and order replacements | <input type="checkbox"/> | |
| | | cleaning equipment available and working properly | <input type="checkbox"/> | |
| | | detergent available and dilution rates known | <input type="checkbox"/> | |
| | | suitable approved disinfectant available and dilution rates known | <input type="checkbox"/> | |
| | | trained, competent and motivated staff available | <input type="checkbox"/> | |
| | | other animals will not be contaminated | <input type="checkbox"/> | |
| | | feed supply and run down or remove feed | <input type="checkbox"/> | |
| AT DEPOPULATION | Check | all livestock removed from the building | <input type="checkbox"/> | |
| | | rodent control effective and intensify plan if necessary | <input type="checkbox"/> | |
| | | insect control measures and apply them as necessary | <input type="checkbox"/> | |
| | | clean out manure, bedding, dust, waste, etc. | <input type="checkbox"/> | |
| | | all moveable equipment taken outside to clean and wash | <input type="checkbox"/> | |
| | | electrical equipment disconnect - DANGER | <input type="checkbox"/> | |
| CLEANING AND WASHING | Check | everything to be cleaned is soaked with water and detergent | <input type="checkbox"/> | |
| | | water system drained, flushed, cleaned, dismantled as necessary | <input type="checkbox"/> | |
| | | feed troughs, feed areas, bins, hoppers, etc. cleaned thoroughly | <input type="checkbox"/> | |
| | | ancillary rooms, fans, storage areas, and rest rooms cleaned | <input type="checkbox"/> | |
| | | bins used for waste material, boot dips cleaned | <input type="checkbox"/> | |
| | | building, pens, other areas pressure washed to remove all dirt | <input type="checkbox"/> | |
| | | all waste disposed of safely | <input type="checkbox"/> | |
| | | all cleaning equipment is cleaned and disinfected after use | <input type="checkbox"/> | |
| | | repairs and maintenance carried out | <input type="checkbox"/> | |
| APPLYING DISINFECTANT | Check | the building is dry before starting | <input type="checkbox"/> | |
| | | dilution, label and COSHH instructions are followed | <input type="checkbox"/> | |
| | | disinfectant applied at low pressure and clings to surfaces | <input type="checkbox"/> | |
| | | Disinfectant is allowed enough time to work effectively | <input type="checkbox"/> | |
| | | disinfection of: | the building (including the water system) | <input type="checkbox"/> |
| | | | moveable equipment and reassemble | <input type="checkbox"/> |
| | all ancillary and common areas | <input type="checkbox"/> | | |
| | feed storage areas, bins, hoppers | <input type="checkbox"/> | | |
| BEFORE RESTOCKING | Check | rodent bait replaced | <input type="checkbox"/> | |
| | | no areas overlooked and all equipment is functioning | <input type="checkbox"/> | |
| | | that building is totally dry | <input type="checkbox"/> | |
| | | double check FEEDERS and DRINKERS for contamination | <input type="checkbox"/> | |
| | | route of entry for new stock has been cleaned and disinfected | <input type="checkbox"/> | |

The effectiveness of detergents and disinfectants depends on 3 key factors:

- TIME - allow enough time for the detergent and/or disinfectant to work - the only one that is Free Of Charge!
- CONCENTRATION - if the solution you make up is not the right strength it will not be effective
- TEMPERATURE - Check the product label for the recommended temperatures - some like it hot, some don't

Disinfection without first cleaning is a waste of money. Use water and a detergent to separate and remove dirt from a surface to make it as free as possible from organic matter, that would not only prevent the disinfectant from reaching the surface but also inactivate some disinfectants before they have had a chance to destroy the bacteria.

The other key factor that determines the effectiveness of cleaning is:

- PHYSICAL ENERGY (eg. a high pressure washer, manual scrubbing or "elbow grease", ...)

The final key factor that works in your favour in getting the site free of infection before the next pigs arrive is:

- DRYING TIME : the longer the buildings have to dry out and remain dry the lower the level of contamination

FEEDER and DRINKERS are the most difficult to clean properly, the most likely to harbour infection and are also the first things the pigs arriving on your unit will seek out. Check, check and check again that these are clean.