Supplementary Table 1: *Salmonella* sample results from pig farms, by farm type.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Farm type** | **No. Farms** | **% farms positive** | **No. samples** | **Mean % samples positive** |
| Fattener | 55 | 38.2 | 1,105 | 9.7 |
| Breeding | 40 | 42.5 | 812 | 9.3 |
| Farrow-to-finish | 104 | 29.8 | 2,060 | 5.8 |

Supplementary Table 2: *Salmonella* serovars detected from 250 European pig farms.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Serovar** | ***S. Derby*** | ***S. Typhimurium, monophasic*** | ***S. Infantis*** | ***S. Typhimurium*** | ***S. Enteritidis*** | ***S. Give*** | ***S. Livingstone*** | ***S. Rissen*** | **Others** |
| No. isolates | 98 | 85 | 31 | 26 | 9 | 7 | 7 | 6 | 28 |
| % of total | 33.0% | 28.6% | 10.4% | 8.8% | 3.0% | 2.4% | 2.4% | 2.0% | 9.4% |

\* Serovars were not determined from farms from DE, NL and EE.

Supplementary Table 4: Multivariable logistic regression of *Salmonella* risk categorisation on pig farms, excluding farms from Estonia and the Netherlands. A further 20 farms were omitted from the model due to a category being dropped as it predicted failure perfectly (model n=179).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Category** | **Odds Ratio** | **P-value** | **95% Confidence Interval** |
| No. of sows | 0 | 1.000 |  |  |   |
| 1-400 | 0.194 | 0.038 | 0.041 | 0.915 |
| 401-1000 | 1.025 | 0.977 | 0.192 | 5.469 |
| 1000+ | 1.875 | 0.550 | 0.238 | 14.759 |
| Not known | 0.906 | 0.902 | 0.191 | 4.304 |
| Are rodent baits used in the surroundings of the farm enclosures? | No | 1.000 |  |  |   |
| Yes | 0.206 | 0.007 | 0.065 | 0.654 |
| NA | 0.130 | 0.118 | 0.010 | 1.679 |
| Are stay-behinds always isolated from the healthy ones (in physically separated hospital area/or by euthanasia)? | No | 1.000 |  |  |   |
| Yes | 0.383 | 0.094 | 0.125 | 1.178 |
| N/A | 0.404 | 0.472 | 0.034 | 4.787 |
| Is the floor in each anteroom/hygiene lock even/ without damages and thereby easy to clean and to disinfect? | Yes | 1.000 |  |  |   |
| No | 0.158 | 0.040 | 0.027 | 0.922 |
| Are all farm buildings/ fields surrounded by a perimeter fence? | Single or double fenced | 1.000 |  |  |   |
| No | 0.157 | 0.010 | 0.038 | 0.645 |
| Partly interrupted | Dropped |  |  |   |
| Which standard cleaning and disinfection procedures are used in the farrowing barns between batches? - Downtime (at least 3 days). | No | 1.000 |  |  |   |
| Yes | 0.203 | 0.018 | 0.054 | 0.764 |
| What kind of flooring system is in the barn sections for fatteners? | Any other flooring | 1.000 |  |  |   |
| Only solid floor | 0.322 | 0.207 | 0.055 | 1.871 |
| Only full slats | 0.359 | 0.107 | 0.103 | 1.249 |
| Not present/ missing | 0.686 | 0.637 | 0.144 | 3.278 |

Supplementary Figure 1: *Salmonella* serovars detected from a selection of European pig farms and the number of isolates detected of each. Single isolations includes *S*. Kedougou, *S*. Newport, *S*. Reading, *S*. Bovismorbificans, *S*. Brandenburg, *S*. Paratyphi B and *S*. Senftenberg.