Main factors affecting efficiency in Irish pig farms: overall conclusions from a representative sample

Teagasc Pig Research Dissemination Day 2018

M. Rodrigues da Costa¹,², L. O’Neill³, J.A. Calderón Díaz¹, J.G. Gasa², G. McCutcheon⁴, L.A. Boyle¹, E.G. Manzanilla¹
Objective

To understand what are the main factors affecting efficiency of Irish pig farms

Quantitative €€€
Results

Research Dissemination Day

2016
- Biosecurity practices in Ireland
- Main problems
- Comparison to other countries

2017
- Main feeding strategies
- Antimicrobials ≠ performance
- Vaccination

2018
- Factory checks: overview
- Lung health
- Main findings
Biosecurity

Raise Awareness!!

Find your weaknesses
Feeding Strategies

Purchasers vs Home Millers
- No apparent difference on Performance

Phase Feeding (finishers)
- Increases performance

Energy levels not reported

Too much protein

Antimicrobials in feed ≠ better performance!!
Factory visits

What did we do?
Data Collection

Winter 2017/2018

- 9 factories
- 70 farms
- 61 factory visits
- 171 batches
- 27,223 pigs
- 32 bloods/farm
- Min 2 batches/farm
- 159 lungs/batch
Lung Health

- **Pleurisy**: Inflammation of the membranes that surround the lungs, attachments to the ribs
- **Pneumonia**: Inflammation of the lung, consolidation
- **Pericarditis**: Inflammation of sac surrounding the heart
- **Milk Spots**: Sign of the migration of parasites
Blood samples

- PRRSv
- APP
- Flu
- MHyo

Serology

[Image of blood samples]
Feedback

#BENCHMARKYOURFARM

- Biosecurity report
- Factory report
- Antimicrobial usage report
Internal biosecurity score

VALUE: 52%
BENCHMARK: 50th
Average: 57%
Min: 24%
Max: 81%

Farms (n=70)
### BIOCHECK.UGENT

**ID:** 27321/984122/v2_0/R  
**Entry date:** 2016-10-04 13:44:30  
**Identification:** BQ3Teagasc

<table>
<thead>
<tr>
<th>Nr</th>
<th>Description</th>
<th>Score</th>
<th>Country average</th>
<th>Global average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Purchase of animals and semen</td>
<td>100 %</td>
<td>99 %</td>
<td>89 %</td>
</tr>
<tr>
<td>B</td>
<td>Transport of animals, removal of manure and dead animals</td>
<td>83 %</td>
<td>81 %</td>
<td>71 %</td>
</tr>
<tr>
<td>C</td>
<td>Feed, water and equipment supply</td>
<td>53 %</td>
<td>55 %</td>
<td>50 %</td>
</tr>
<tr>
<td>D</td>
<td>Personnel and visitors</td>
<td>71 %</td>
<td>74 %</td>
<td>69 %</td>
</tr>
<tr>
<td>E</td>
<td>Vermin and bird control</td>
<td>90 %</td>
<td>71 %</td>
<td>67 %</td>
</tr>
<tr>
<td>F</td>
<td>Environment and region</td>
<td>100 %</td>
<td>84 %</td>
<td>60 %</td>
</tr>
</tbody>
</table>

*Subtotal External biosecurity:* 83 %  
**Country average:** 79 %  
**Global average:** 71 %
#BENCHMARKYOURFARM
Teagasc Pig Development Department

![Diagram showing percentage of pleurisy, pneumonia, pericarditis, and milk spots with benchmark values.]

This report is intended for farmers. Veterinary practitioners and advisors can get more detailed information by contacting Teagasc. Written authorization from the farmer will be required before any data can be shared.
## Detailed report

### Your results by SLAP and date

<table>
<thead>
<tr>
<th>SLAP/Date</th>
<th>No Lungs scored</th>
<th>% Dorso-Caudal Pleurisy</th>
<th>Average score Dorso-Caudal Pleurisy</th>
<th>% Cranial Pleurisy</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/12/2016</td>
<td>134</td>
<td>11.2%</td>
<td>2.40</td>
<td>13.4%</td>
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<tr>
<td>18/04/2017</td>
<td>35</td>
<td>17.1%</td>
<td>3.00</td>
<td>17.1%</td>
</tr>
<tr>
<td>29/11/2017</td>
<td>77</td>
<td>2.6%</td>
<td>3.50</td>
<td>3.9%</td>
</tr>
<tr>
<td>29/02/2018</td>
<td>214</td>
<td>5.1%</td>
<td>3.09</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>115</strong></td>
<td><strong>9.0%</strong></td>
<td><strong>3.00</strong></td>
<td><strong>11.5%</strong></td>
</tr>
</tbody>
</table>

### Global average

- % Dorso-Caudal Pleurisy: 9.0%
- % Cranial Pleurisy: 11.5%

### Severity of lesions

#### EP-like lesions

<table>
<thead>
<tr>
<th>SLAP/Date</th>
<th>No Lungs scored</th>
<th>% Bronchopneumonic Lungs</th>
<th>% Average Surface Affected Out of Pneumonic Lungs</th>
<th>% Scar</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/12/2016</td>
<td>134</td>
<td>39.6%</td>
<td>8.1%</td>
<td>20.1%</td>
</tr>
<tr>
<td>18/04/2017</td>
<td>35</td>
<td>34.3%</td>
<td>9.4%</td>
<td>31.4%</td>
</tr>
<tr>
<td>29/11/2017</td>
<td>77</td>
<td>33.8%</td>
<td>10.8%</td>
<td>13.0%</td>
</tr>
<tr>
<td>23/02/2018</td>
<td>214</td>
<td>37.9%</td>
<td>9.5%</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
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<td><strong>36.4%</strong></td>
<td><strong>9.5%</strong></td>
<td><strong>18.6%</strong></td>
</tr>
</tbody>
</table>

#### Heart, Liver

<table>
<thead>
<tr>
<th>SLAP/Date</th>
<th>No Lungs scored</th>
<th>% Pericarditis</th>
<th>% Milk Spots</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/12/2016</td>
<td>134</td>
<td>9.0%</td>
<td>0.0%</td>
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<tr>
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<td><strong>14.7%</strong></td>
<td><strong>1.3%</strong></td>
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</table>
Reports | Use of Antimicrobials

How does your farm compare to others?

Routes of Administration

Which AM are used in your farm?
Reports

Biosecurity

Factory checks

Your report

Use of Antimicrobials

Serology

Farmer | Vet | Advisor
Take home message

• Each farm is a different case

• Gather your Team:
  • FARMER + advisor + vet

• Discuss results
  • Decide next step
To all
Farmers & Slaughterhouses
Thank you!!
Thanks for your attention!

That’s All folks!