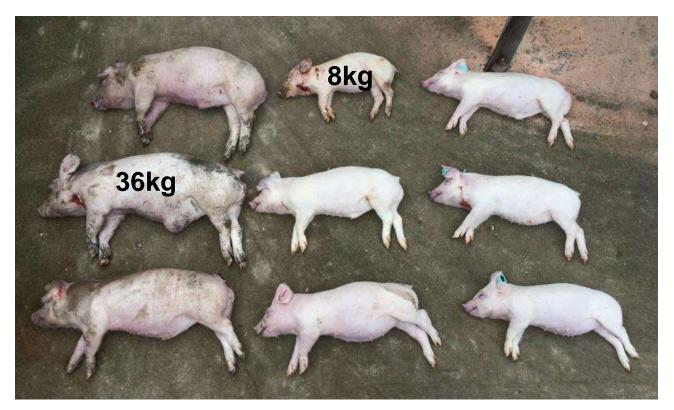
### Performance, health and welfare of pigs not complying with all-in-all-out EPP Congress, 25-27<sup>th</sup> May 2016

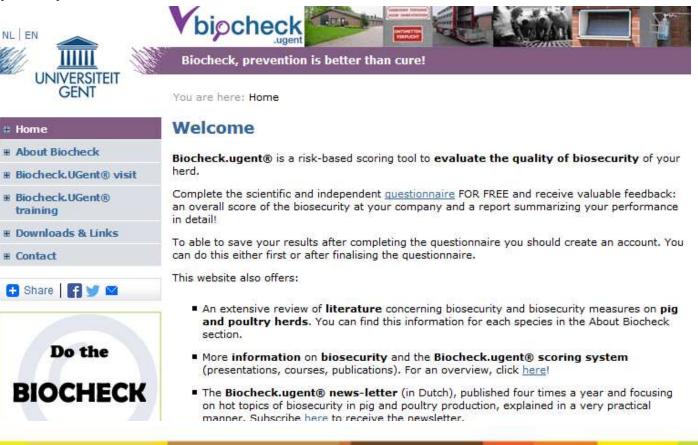


Edgar Garcia Manzanilla Pig Development Department, Teagasc, Moorepark, Fermoy, Co. Cork.



## **Exploring biosecurity**

Biocheck is a web-based tool that evaluates the quality of biosecurity of your herd











## **30 Farrow-to-Finish Irish Farms**

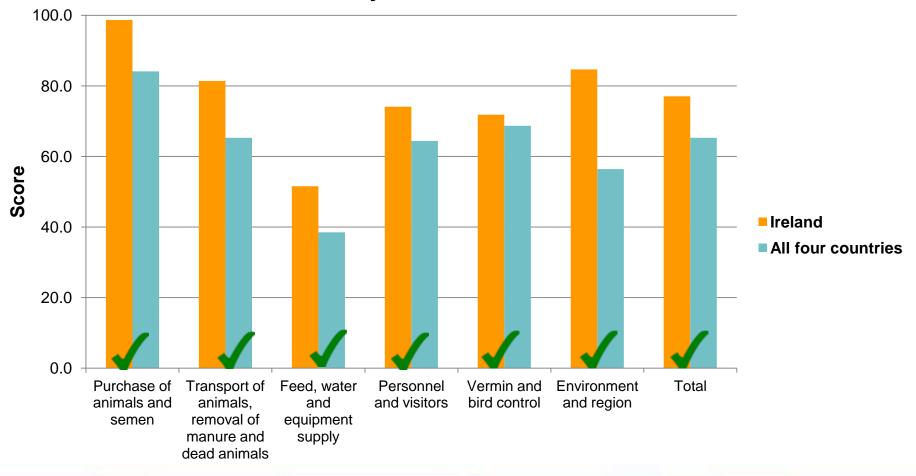


	Sows	Finishers	Experience	Workers				
Max	2300	9000	50	14				
Min	180	500	5	1.5				
Average	626	3139	26.9	4				
Currently 43 farms did the questionnaire								



## How did we score?

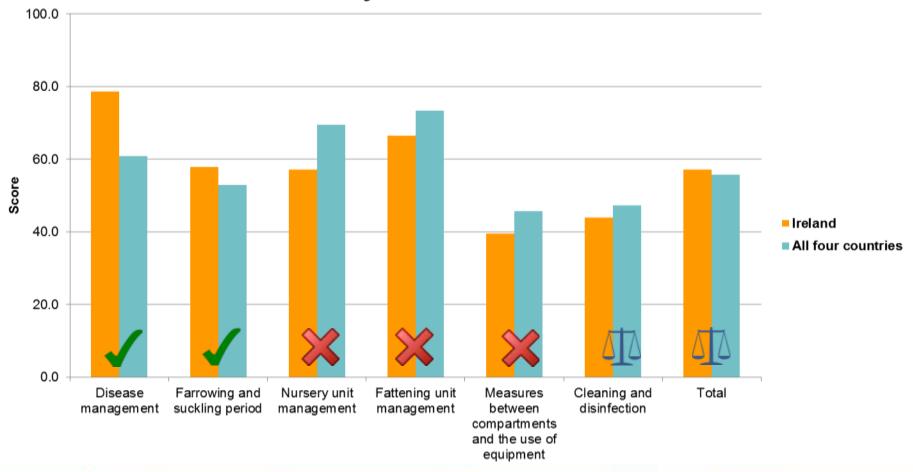
#### External Biosecurity in Ireland and in the EU





## How did we score?

#### Internal Biosecurity in Ireland and in the EU





#### THE FARM

1500 sow farm, farrow-to-finish Frequent respiratory problems, positive to influenza...

THE TRIAL

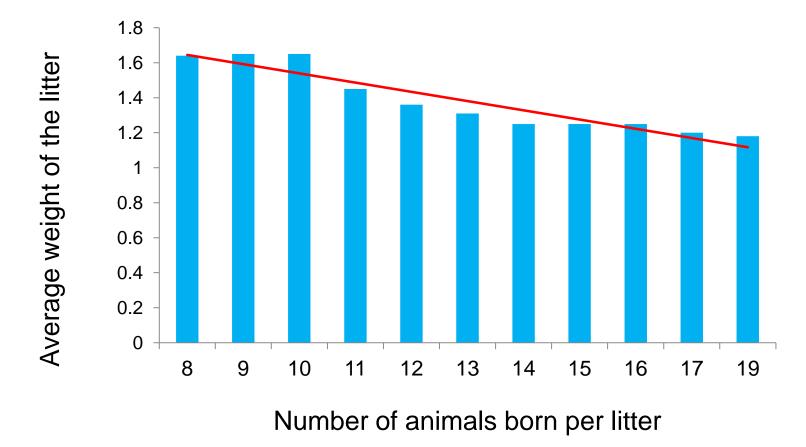
84 sows (gilts and sows) - 1050 piglets tagged Followed from birth to abattoir

Animals killed for pathology check, sampling, bleeding...





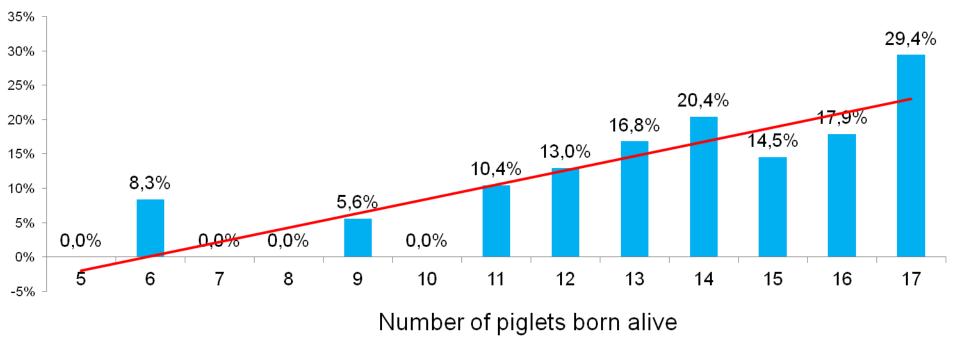
# INCREASING LITTER SIZE RESULTED IN LOWER AVERAGE PIGLET WEIGHT





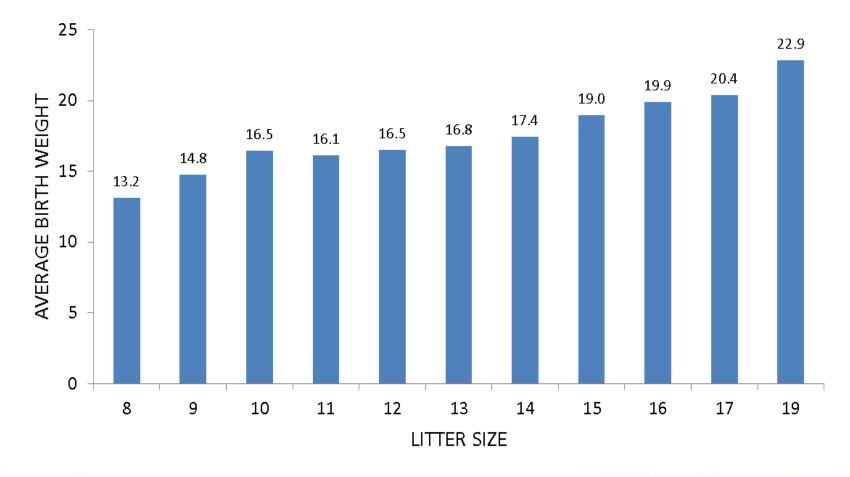
# INCREASING LITTER SIZE RESULTED IN MORE SMALL ANIMALS ... AND MORE LABOUR

Percentage of piglets <1kg





# THE FARMER WANTED TO KNOW: IS THERE A LIMIT FOR THE TOTAL WEIGHT PRODUCED BY THE SOW?

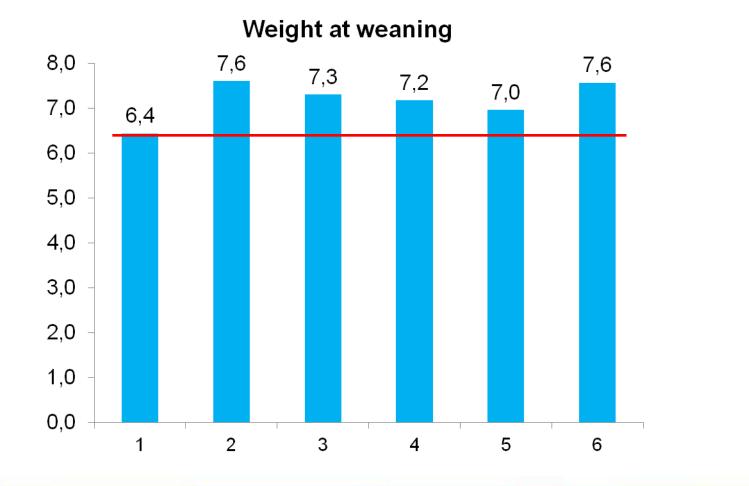




#### WEANING AND FINISHING - PARITY EFFECT

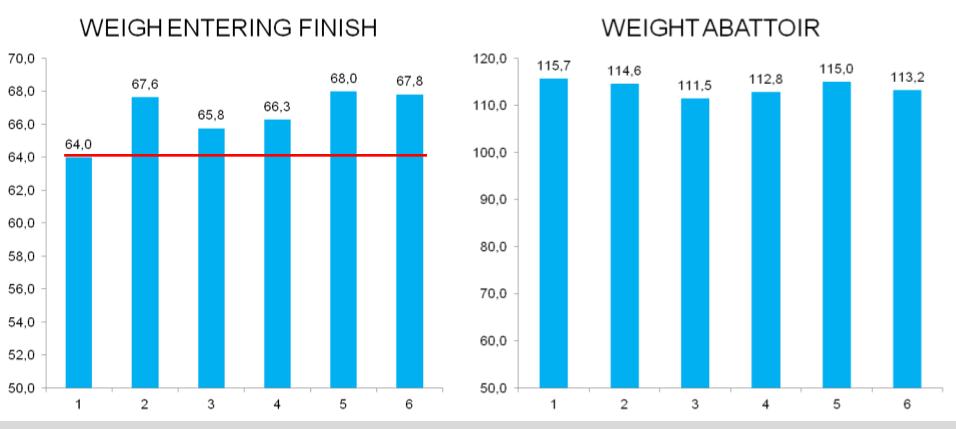


#### WEANING AND FINISHING - PARITY EFFECT



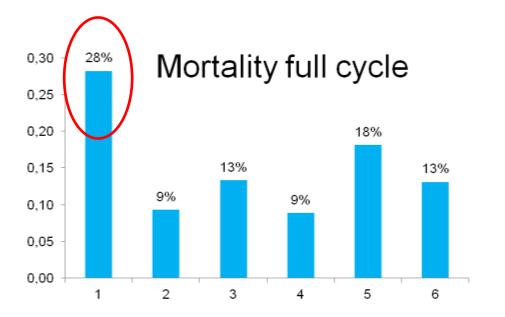


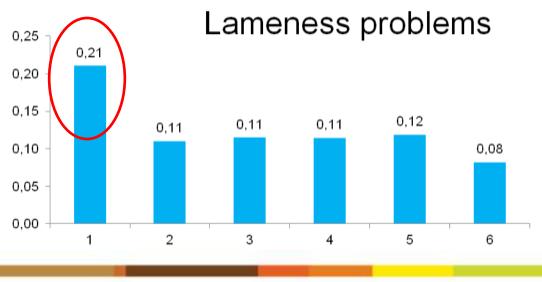
#### WEANING AND FINISHING - PARITY EFFECT



FIRST PARITY ANIMALS WERE ABLE TO COMPENSATE THE INITIAL DIFFERENCE IN WEIGHT BUT...





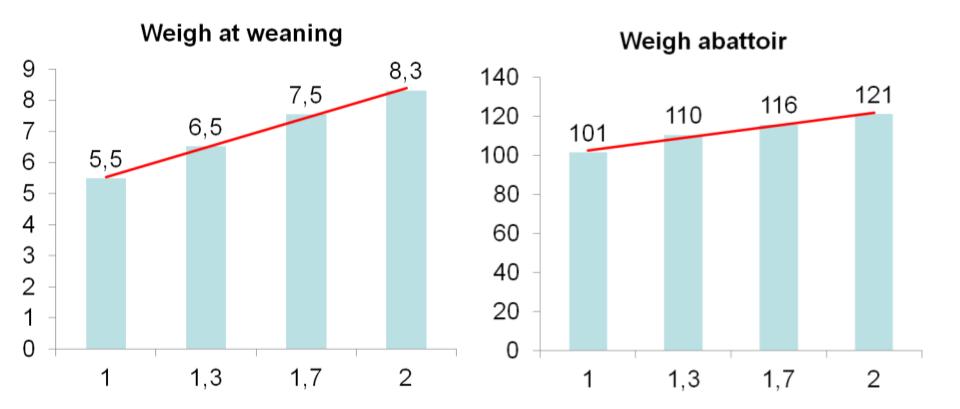




#### WEANING AND FINISHING, BIRTH WEIGHT EFFECT



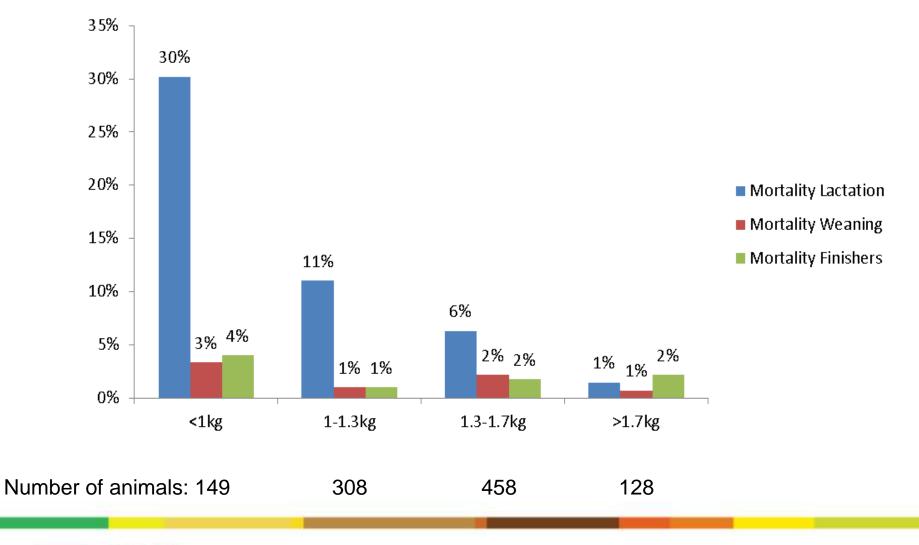
BIRTH WEIGHT GROUPS: <1kg 1 - 1.3kg 1.3 - 1.7kg >1.7kg



#### EXTRA 100g OF BIRTH WEIGHT RESULTS IN EXTRA 2kg OF DIFFERENCE AT THE ABATTOIR

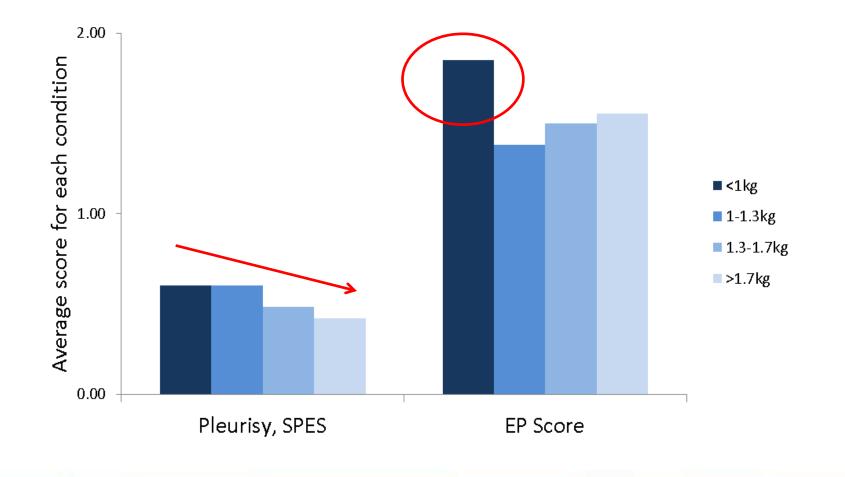


#### EFFECT ON BIRTH WEIGHT ON MORTALITY





#### EFFECT ON BIRTH WEIGHT ON PLEURISY AND PNEUMONIA





### LET'S TAKE A LOOK AT ANIMAL MANAGEMENT WITHIN THE FARM

### INTERNAL BIOSECURITY



#### WEEK 5

WEEK 6 R 0 0 М 1 R 0 0 М 2 R 0 0 М 3 R 0 0 М 4 Animals weaned one R 0 week later 0 М 5 Animals R 0 moved to 0 М hospital 6

Big animals weaned early from the following litter (21d old)



The Irish Agriculture and Food Development Authority

R

0

0

Μ

1

R

0

0

М

2

R

0

0

М

3

R

0 0

м

4

R

0

0

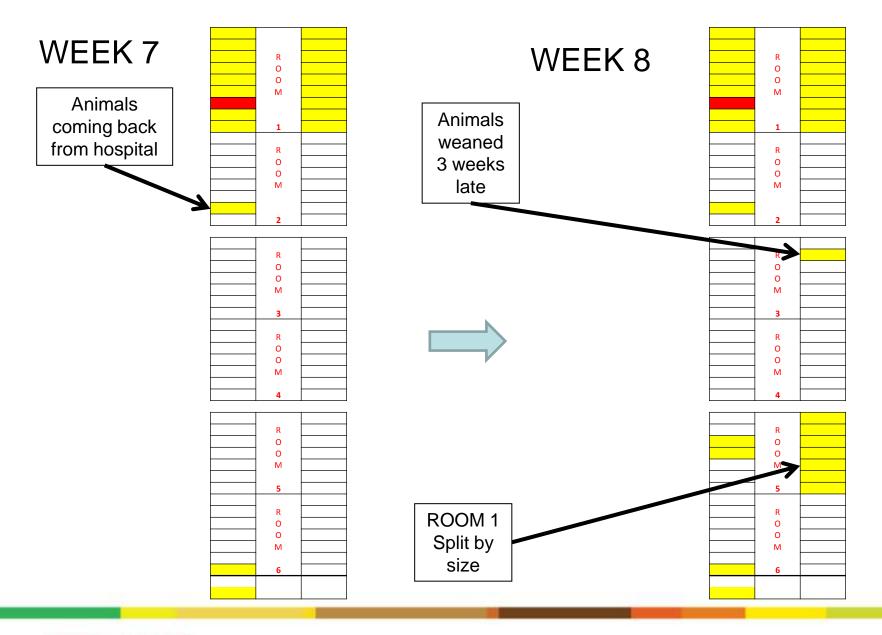
М

5

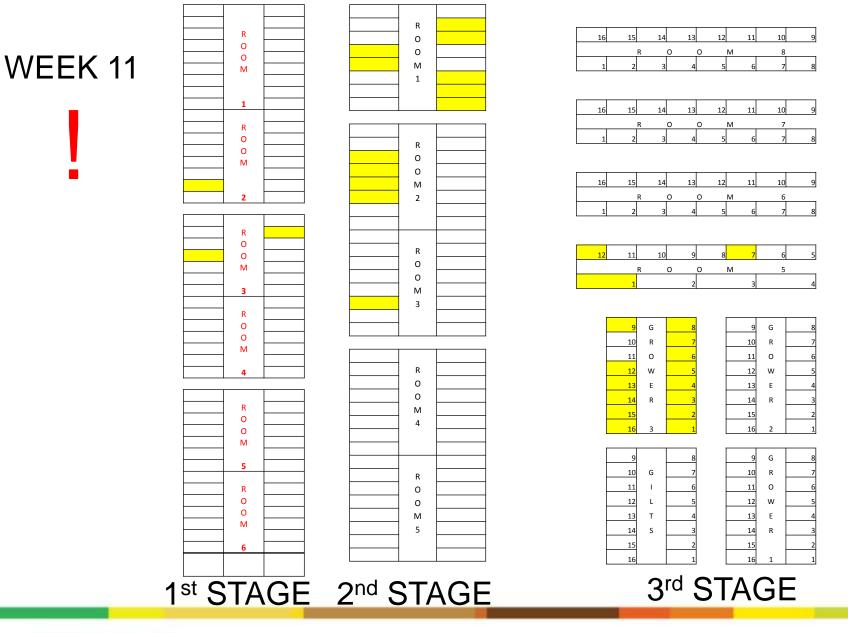
R O

0 M

6





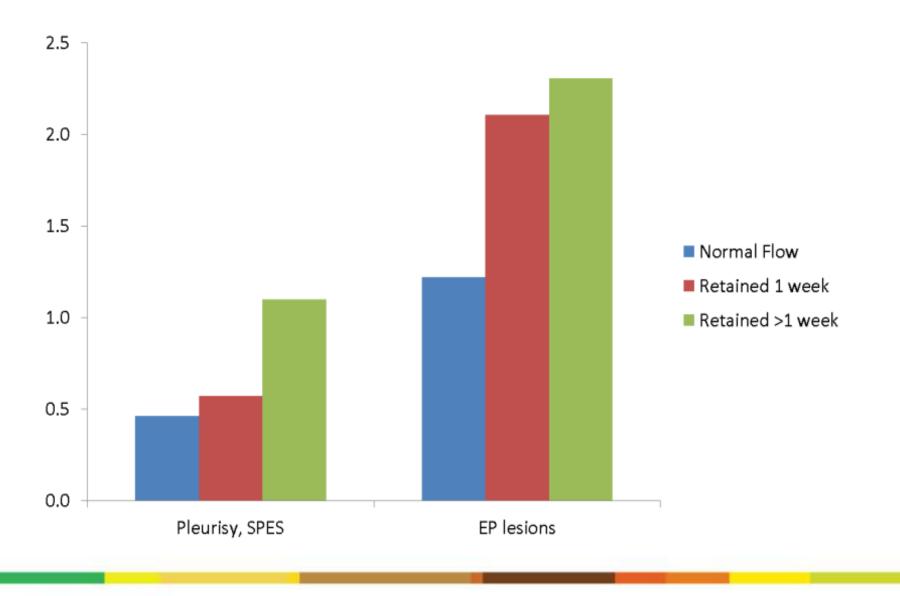




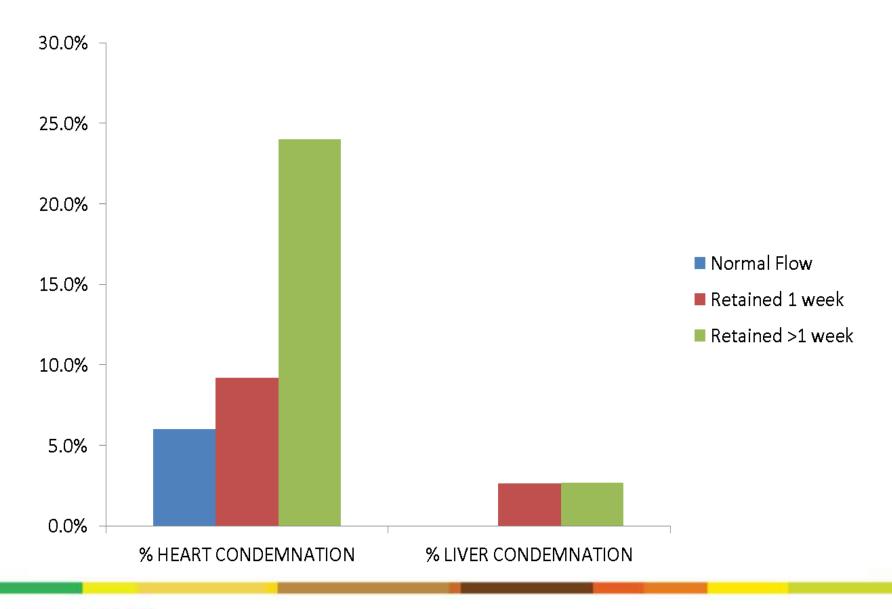
#### WE IDENTIFIED 3 MAIN FLOWS OF ANIMALS

	Pigs normal flow	Pigs retained 1 week	Pigs retained several times
Number of animals	150	75	75
Average birth weight, kg	1.22	1.22	1.21
Birth weight variability, %CV	23%	23%	24%
Average litter size	13.4	13.7	13.3
Average parity	3.3	3.4	3.0
Average body weight at weaning, kg	7.2	5.2	5.9
Weaning weight variability, %CV	17%	21%	27%
Average carcass weight , kg	87.9	85.7	79.3
Carcass weight variability, %CV	10%	11%	14%

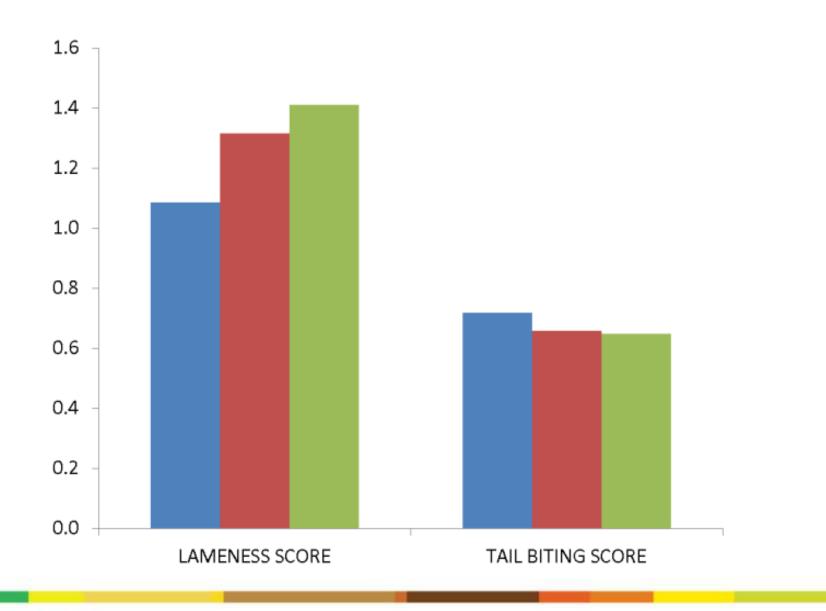










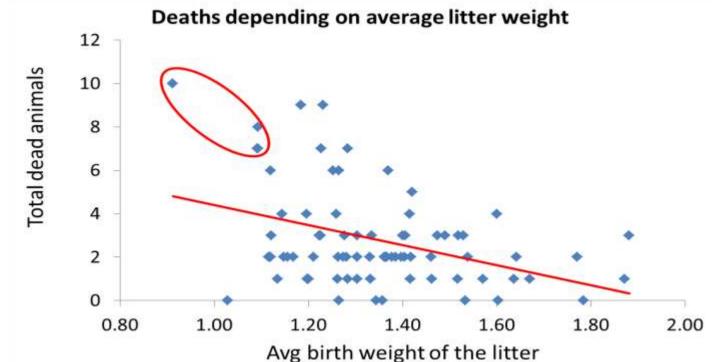




WHAT DO WE DO?
HOW DO I DECIDE?...
BY SOW?...
BY PIGLET?...
TOTAL LITTER WEIGHT?...
TOTAL NUMBER BORN ALIVE?...
HIGHER BIRTH WEIGHT?



#### WHICH LITTERS ARE A PROBLEM?



SOW	Born alive	BW0	Dead Lact	Dead Weaning	Dead Finishing	Abattoir	Carcass weight
2850	13	1.09kg	4	3	1	5	75.8kg
2726	13	0.91kg	5	4	1	3	65.7kg



## CONCLUSIONS

Killing small pigs? Creating separated flows?

Treatments are not going to solve this issue.

I will wait for the analysis...





