

Farrowing Accommodation for Organic Pigs

Herman Vermeer and Henk Altena



ANIMAL SCIENCES GROUP
WAGENINGENUR

Developing organic farrowing pens

■ EU regulations:

- min. 7.5 m² indoor and 2.5 m² outdoor
- max. 50% slatted
- straw on solid floor
- lactation: min. 6 weeks
- sow loose housed

■ In practice:

- renovated buildings
- sub optimal conditions
- higher mortality caused by crushing
- no pasture for farrowing sows, all on “floors”



Aims

1. Improving piglet survival for animal welfare and profitability
2. Developing the best pen layout for new building regarding practical feasibility (e.g. labour demand)



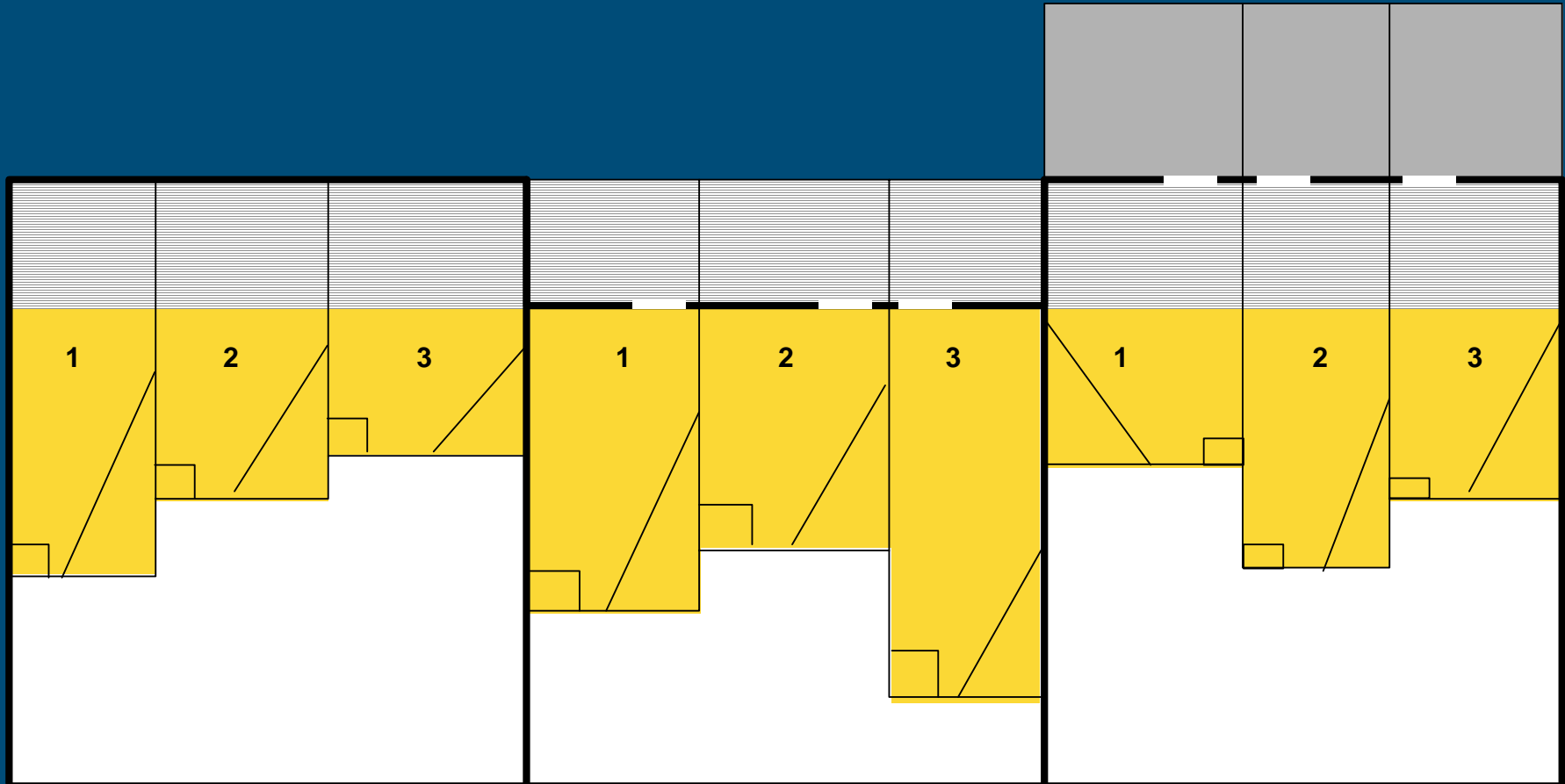
Materials and Methods

- 3 rooms with 3 pens each
- 3 pen widths (1.7 – 2.0 – 2.4 m)
- 3 years

- Observations:
 - Performance
 - Lying behaviour of piglets
 - Dunging and lying behaviour of the sow



Layout of the 3 farrowing rooms

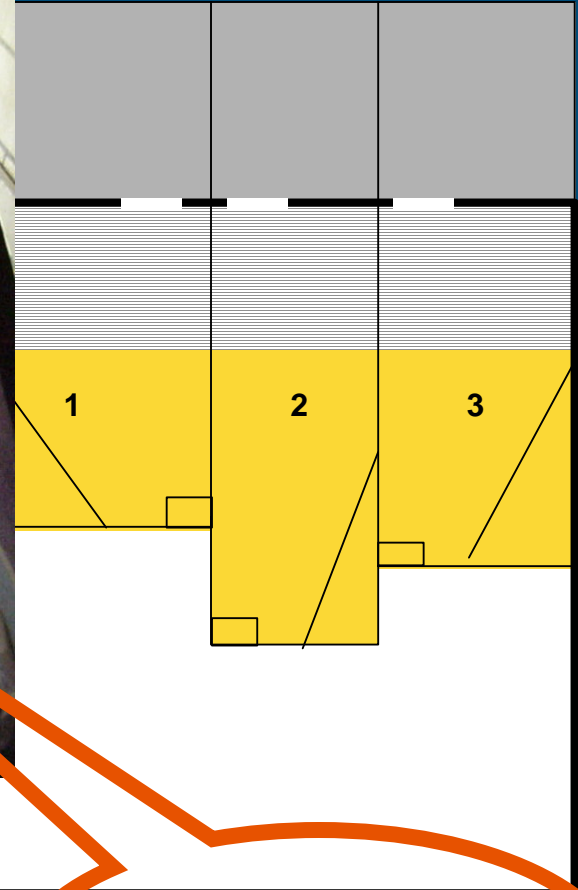


No Run

Indoor Run

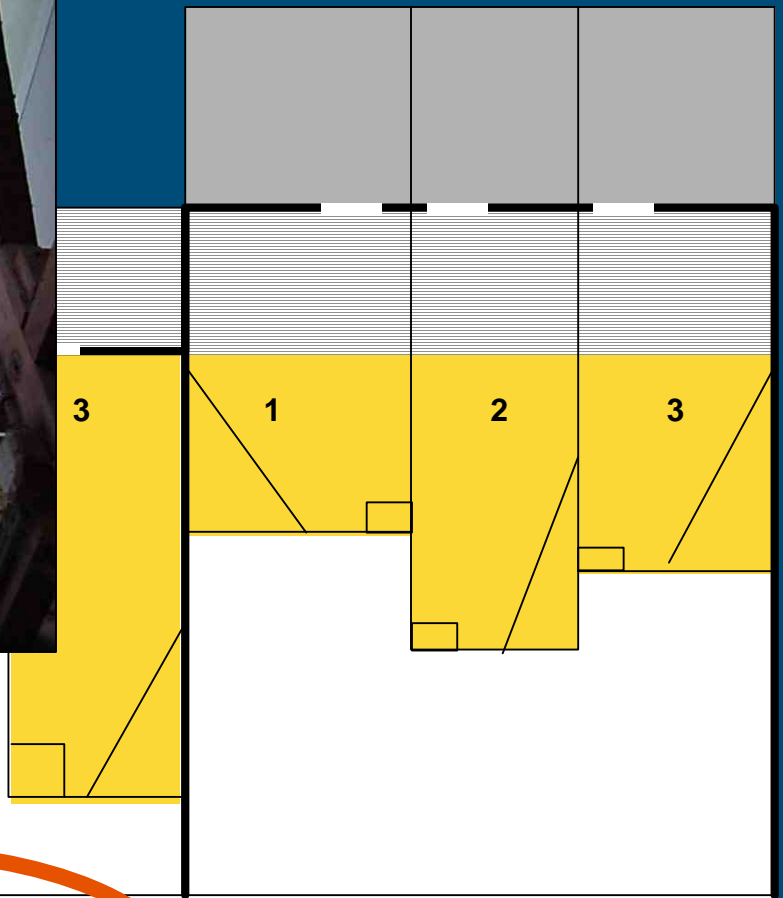
Outdoor Run





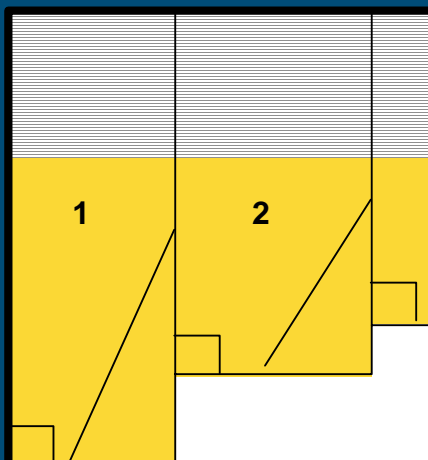
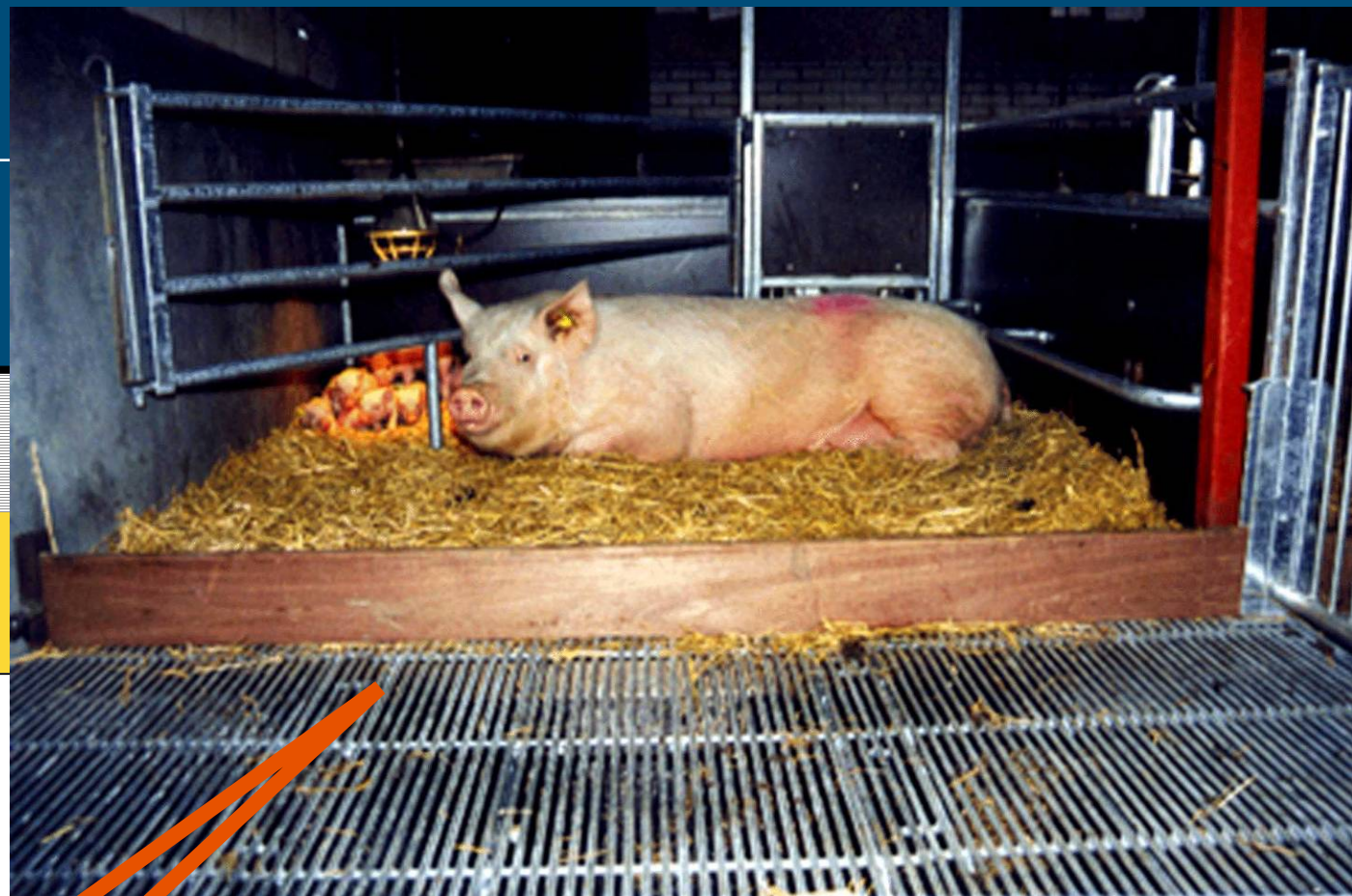
Outdoor Run





Indoor Run





No Run



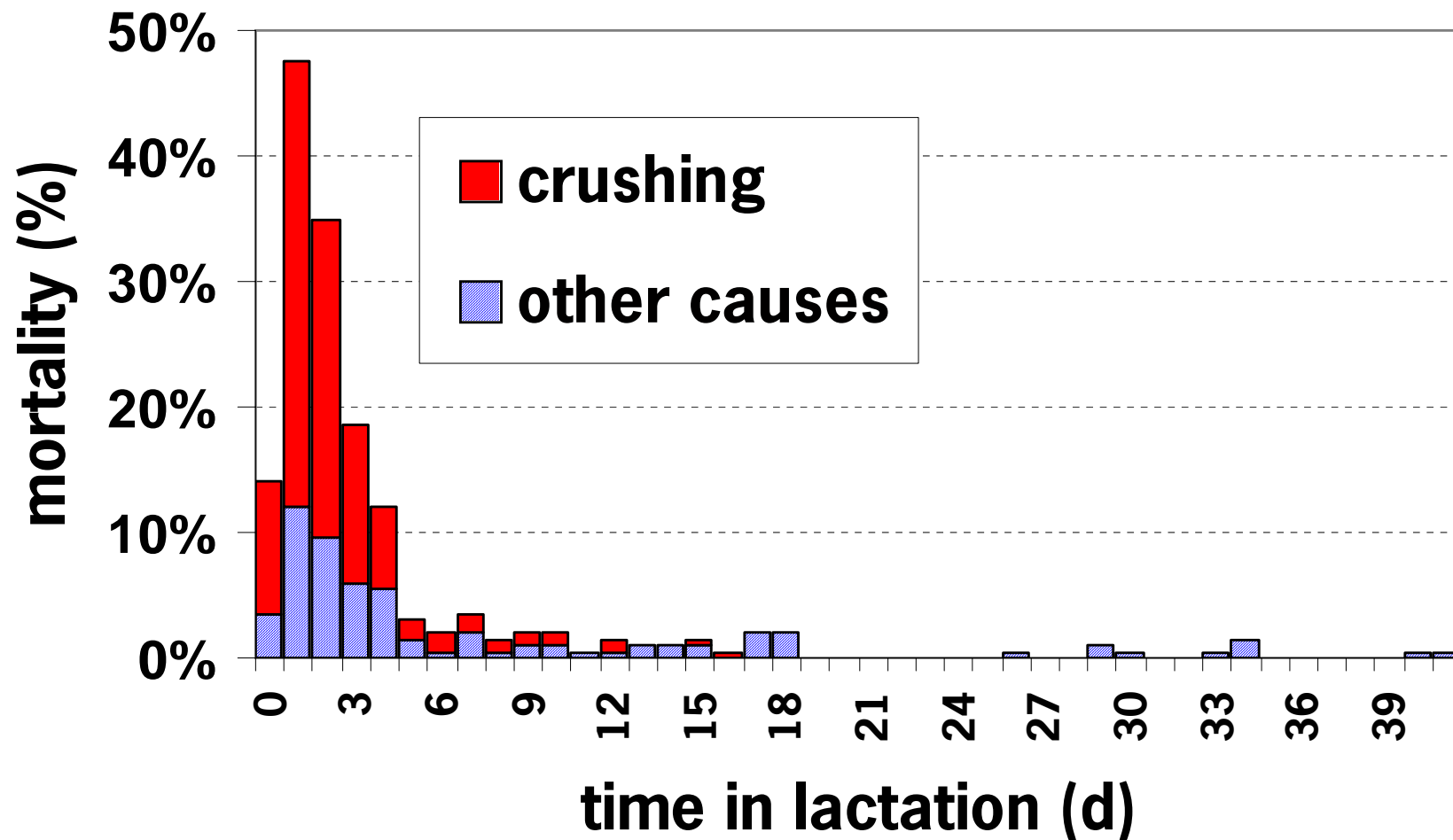
Results: Performance

	Outdoor Run	Indoor Run	No Run
N litters	45	47	39
Liveborn/litter	12.2	12.9	11.3
Weaned/litter*	9.6 ^a	10.4 ^b	9.8 ^a
Mortality (%)*	19.6 ^a	14.1 ^b	18.0 ^a

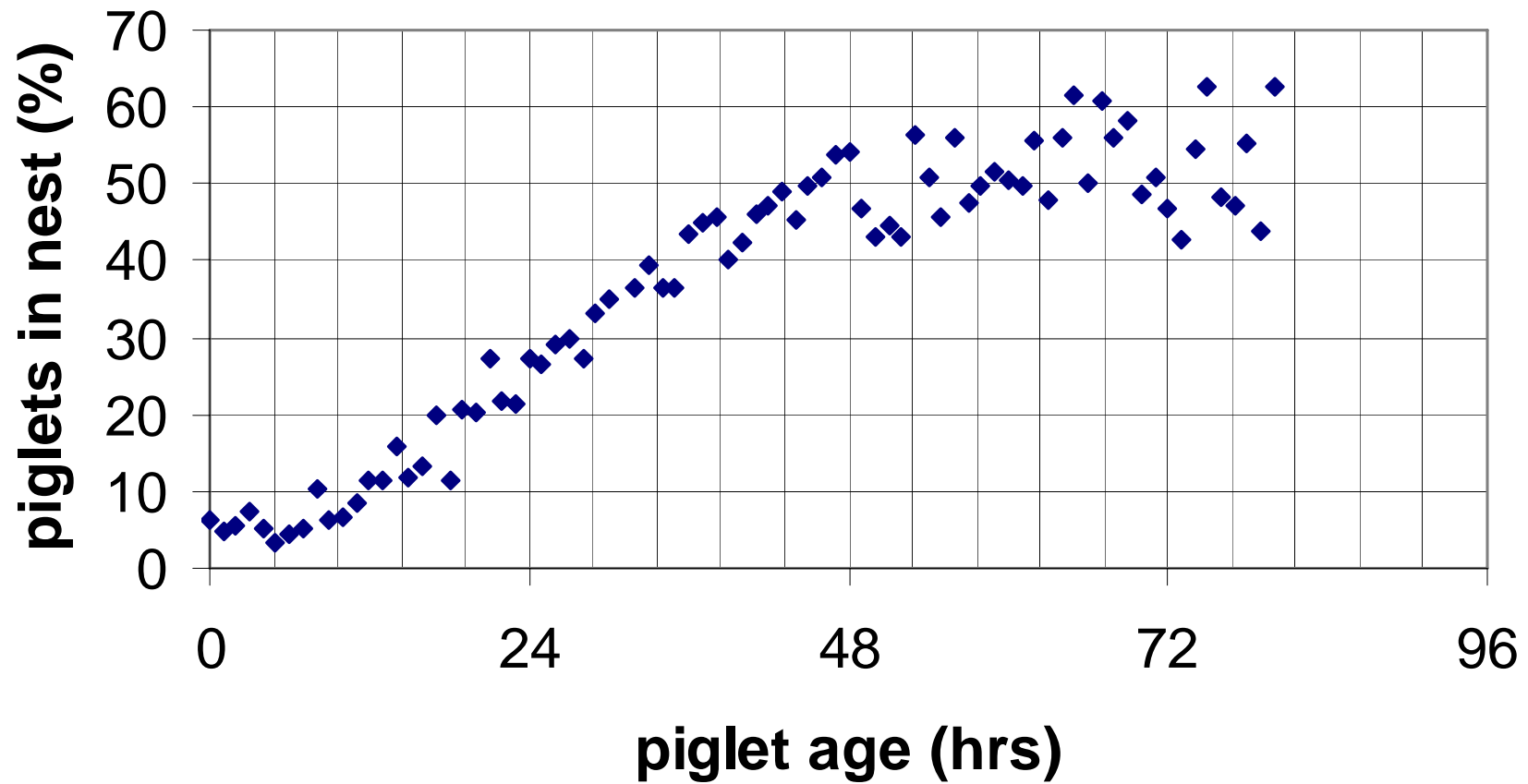
* Corrected for parity and liveborn, $p=0.05$ for weaned/litter and $p=0.10$ for mortality



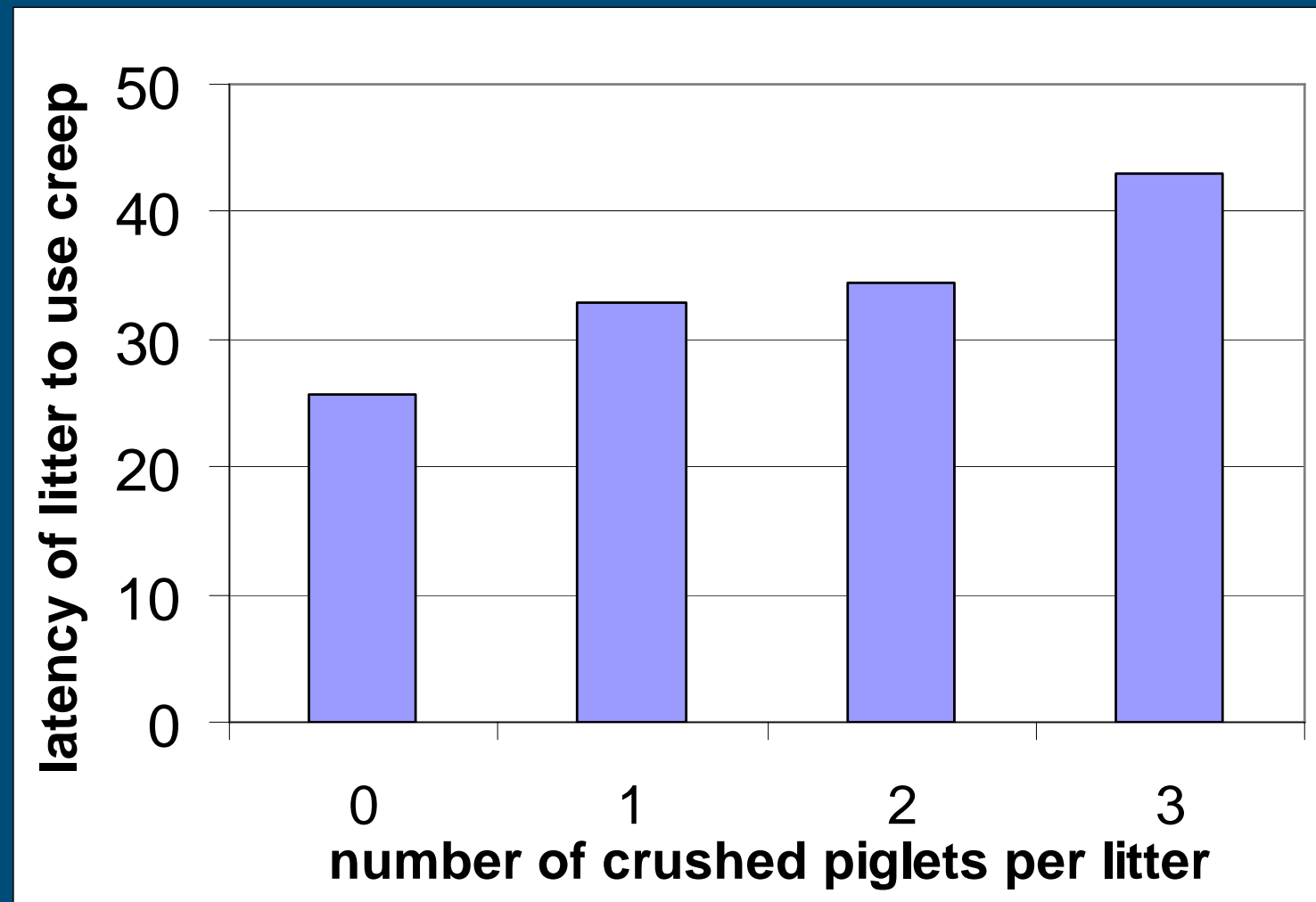
Results: Time and cause of mortality



Results: Lying behaviour of the litter



Latency in creep use and crushing

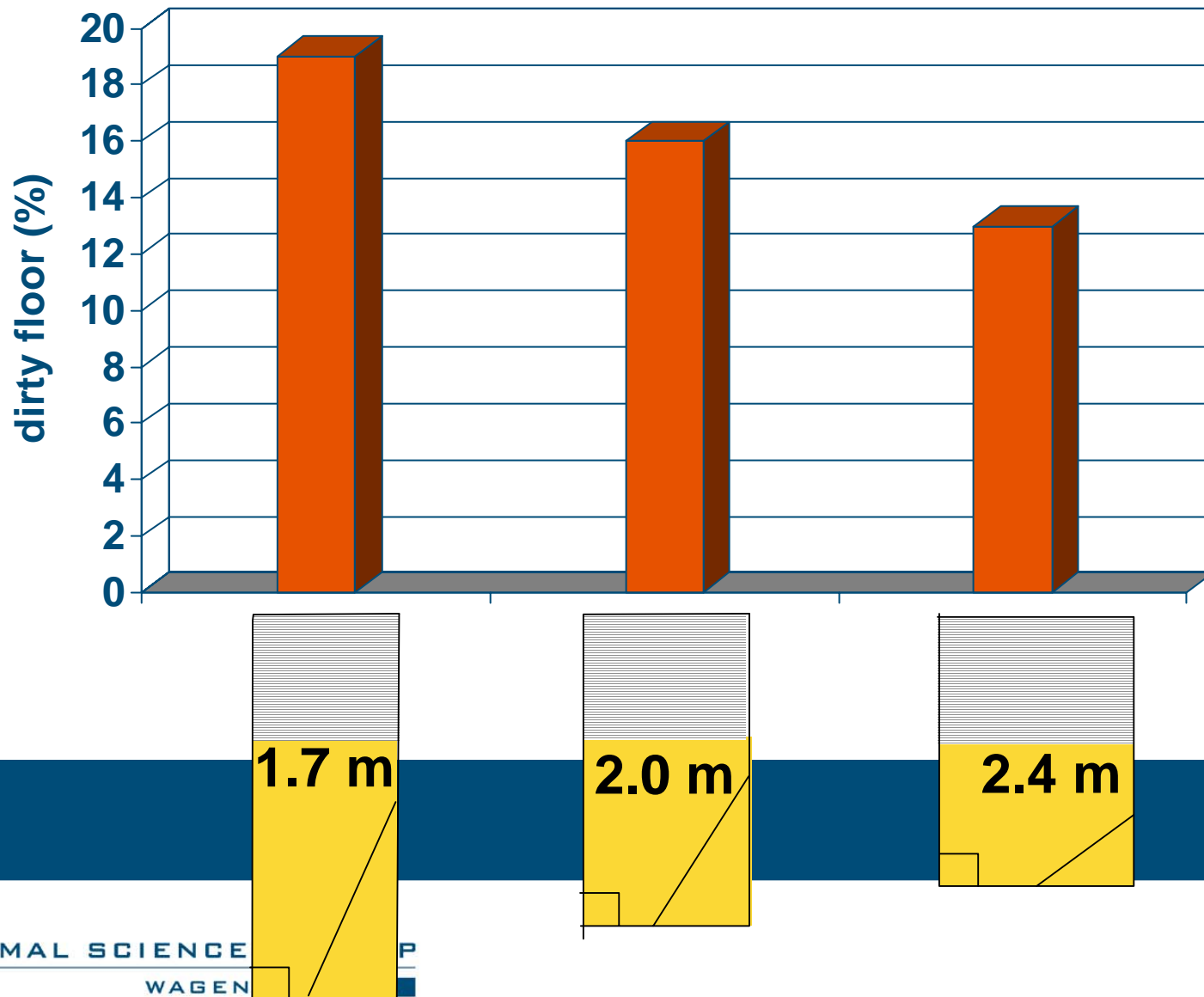


Results: Dunging behaviour

	Outdoor Run	Indoor Run	No Run
Dirty floor %	13 ^a	21 ^b	19 ^b
Lying on floor %	51	54	58
Straw (kg)	61 ^a	79 ^b	80 ^b



Results: Pen width and dunging behaviour



Conclusions

- Lower mortality in room with more solid floor
- Less crushing in litters with rapid use of creep
- Pens with outdoor run are cleaner
- Pen width of 2.4 m cleaner than 1.7 m

Results are incorporated in new research facilities

Newborn piglet survival is focus for next years



Current projects:

- Additional floor heating in first 24 h after birth
- More solid floor: from 4.5 to 6.0 m²



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