The Pig

A producer's guide to the care and management of the compromised animal



Portec Australia

Introduction

It is vital to the welfare and well-being of farmed pigs that when a pig becomes compromised, suitable facilities are provided for these unfortunate animals. The aim of this guide is to provide an outline of an ideal environment which can be provided for these animals recovery. In addition the guide provides an advice flow to help producers and stockpeople to reach an acceptable decision in a timely manner. The guide for pigs is based on three important decisions times, at initial observation, after 7 days of treatment and after 14 days of treatment. Pigs with an incurable sickness need to be destroyed promptly and humanely. The guide encourages producers to keep records of compromised animals. The documents and records help to ensure that medical residues do not enter the food chain.

The whole farm team from stockperson to farm veterinarian should be intimately involved in designing a decision tree tailored made for the farm.

The guide is divided into five sections

The hosp	The hospital pen				
	The design of the hospital pen				
	Protocols for new entrants				
	Hospital records				
Care of the	Care of the compromised growing pig				
Care of the	Care of the compromised adult pig				
Euthanasia in the pig					
Decision	Decision tree for the treatment and care of the compromised pig				

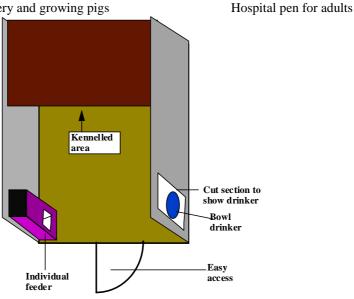
The Hospital Pen: 1. Design

1	Deep dry straw bedding covering a non-slip, insulated concrete floor
2	Good draught free ventilation. The provision of a kennelled area should be available
3	Provide an individual feeder, which is hand filled twice daily. There should never be a lot of food in the feeders so that in-feed medication is possible
4	Provide a bowl drinker which is set at 30 cm above the ground for 20 kg pigs or more. This drinker should be fed from a separate header tank to enable easy medication if necessary
5	Easy entry and exit points which do not necessitate lifting of the animal over steps
6	Pigs in this pen should be examined a minimum of twice daily and the hospital pen records should be completed
7	All hospital pen pigs should be tagged and treated as individuals on entry
8	Pigs in the sick pen may need a companion
9	Each hospital pen should be of adequate size to hold up to ten pigs





Hospital pen for nursery and growing pigs



The Hospital Pen 2: Procedures For New Entrants

Responsible	Persons Supervisor
1	Entry of each pig. Complete the disease monitor and initial
2	Identify the pig by ear tag or marker. Pigs over 60 kg must be tagged
3	Examine the pig. Discuss with supervisor the condition and the action to be taken if in doubt
4	Take rectal temperature
5	Has medicines been recommended for the condition?
6	Any special nursing or welfare conditions, nutrition, water?
7	Identify medicines to be used. Consult the medicine list
8	Calculate dose rates and method of administration
9	After treatment complete the documentation in the medicine book

The Hospital Pen: 3. Records

Date Started	Animal Number	Disease condition and treatment		Response days after start $X = \text{still sick } \sqrt{= \text{recovered}}$												
			1	2	3	4	5	6	7	8	9	10	11	12	13	14
						-										

Care of the compromised growing pig

To send to slaughter all growing/finishing pigs must be over 60 kg in weight and have a body condition score of 3 or greater, if less than condition score 3 treat or destroy

All pigs hospitalised must be identified with a numbered ear tag.

All medication withdrawal periods must be complied with.

Condition	Extent	Immediate action	Action after x days		
Lameness	Unable to use back legs	Destroy			
	Infected joints with soft pus filled abscess	Treat or destroy	7 days no improvement destroy		
	Multiple joints infected	Destroy			
	Single infected joint with non- discharging abscess less than golf ball size and able to walk unassisted	Treat as necessary	Send to slaughter as soon as possible		
	Cannot walk with all four feet on ground	Treat or destroy in hospital pen	7 days no improvement destroy		
	Fractured bone	Destroy			
	Broken leg	Swollen joint	Broken back		
Hock sores	Less than 3 cm and walking without lameness	Keep on deep straw in hospital pen	If healed <14 days send to slaughter as soon as possible No improvement destroy		
Bush foot but not lame	One joint only. No discharge and no swelling up leg	Treat as necessary	When the pig goes to slaughter send in separate pen		
	Hock sores	Bush foot			
Tail bitten	Abscessed	Destroy	·		
Tan bitten	Base of spine exposed	Destroy			
	Tail bitten and lame	*	estroy		
	Infected with no abscesses	Treat in hospital pen	If healed within 14 days retain separate until slaughter		
	Fresh with no infection	Treat in hospital pen	Send to slaughter as soon as possible		
	Tail bitten severe	Tail bitten and lame	Fresh no infection		
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Condition	Extent	Immediate action	Action after x days
Open wounds	Cuts of any type	Treat in hospital pen	When healed send to slaughter as soon as possible
Wounus	Grazes less than 6 cm	Treat if necessary	Send to slaughter as soon as possible
	Cut = damage through whole	skin. Graze = surface skin dan	nage only
Flank bites	Greater than 6 cm or infected	Treat in hospital pen	Once healed send to slaughter as soon as possible
	Fresh. No infection less than 6 cm and superficial.	Treat if necessary	Send to slaughter as soon as possible
_	Open wounds	Flank biting	Beaten up pig
Beaten up pigs	Numerous fight marks	Treat in hospital pen individually	Sick for more than 3 days destroy
Ear haematoma	Large and any infection and swelling	Treat in hospital pen	Leave a week, then if necessary lance and when healed send to slaughter as soon as possible
Crumpled ear	Healed and no infection	No treatment necessary	Send on normal load
Middle ear infection	Can walk unaided	Treat as necessary	Send to slaughter as soon as possible
inicction	Cannot walk unaided	Destroy	
	Ear haematoma	Ear crumpled	Middle ear
Ruptures	Belly, scrotal or groin rupture and	No effective treatment	Send to slaughter as soon as
Hernias	9 cm clear of ground with no damage or infection	possible	possible
	Pedunculated rupture with no damage or infection	No effective treatment possible	Send to slaughter as soon as possible, separate on the truck
	Rupture in contact with ground, with skin damage or infected	Destroy	
	Any p	oig with a hernia that is bigger t	han 30 cm should be destroyed.

Send pigs with large hernias to the cutter market at 70 kg rather than trying to get them to bacon weights

Condition	Extent	Immediate action	Action after x days
Rectal	Fresh, no smell, no bigger than	Send to slaughter as soon as	Or stitch in and send to
prolapse	15 cm	possible	slaughter as soon as possible
<u> </u>	Larger than 15 cm	Destroy	
Rectal	Any type	Des	stroy
stricture			
Pneumonia	Walking but off food	Treat in pen	24 hours no improvement move to hospital pen. No response to treatment for 7 days destroy
	Rectal prolapse	Rectal stricture	Pneumonic
Thin pig	With or without scour	Treat in hospital pen	If no response clinically within
Timi pig	With of Without Scott	Treat in nospital pen	7 days and no visible improvement within 14 days destroy
PMWS		Treat in hospital pen	If no response clinically within 7 days and no visible improvement within 14 days destroy
PDNS		Treat in hospital pen	If no response within 7 days destroy
Kinky back or	Visibly deformed and affects	Mark in the pen	Discuss with veterinarian
other	ability to slaughter pig		
abnormality			
	Thin pig	PDNS	Kinky back
All pigs, wh	nich present with a condition t	hat makes them unlikely to l	be slaughtered for human

All pigs, which present with a condition that makes them unlikely to be slaughtered for human consumption should be destroyed as soon as this decision is reached.

It is essential that the appropriate therapy is used for each condition and that all pigs are slaughtered after the relevant withdrawal period has elapsed.

What to do with Compromised Adults

To send to slaughter all adults must have a body condition score of 2 or greater,

if less than condition score 2 treat or destroy. All adults hospitalised must be identified with a numbered ear tag

Condition	Extent	Immediate action	Action after x days	
Prolapses	Uterine	Immediate treatment or Destroy		
	Vagina	Immediate casualty slaughter		
		Treat if found fresh	Sell as soon as possible. If	
			re-prolapses destroy	
	Rectum	Immediate casualty slaughter if		
		not excessive Treat if found fresh and	Sell as soon as possible. If	
		undamaged	re-prolapses immediate culling	
	Uterine prolapse	Rectal prolapse		
Open wounds	Traumatic injuries,	Severe - destroy		
	cuts and wounds	Not severe- treat	Sell when healed. If in	
	CI 11 1	m 4 1 11 1	doubt ask the vet Sell when healed	
	Shoulder sores and ulcerated hocks	Treat and move to bedded area.	Sell when healed	
	Traumatic injuries	Ulcerated granuloma	Shoulder sore	

Lameness	Off back legs	Destroy				
	Acutely lame	Severe - destroy				
	,	Not severe - Treat	If still lame after 7 days destroy			
	Lame with no obvious cause	Severe - Destroy or treat	If still lame after 7 days Destroy			
		Not severe - treat in bedded area	If still lame after 7 days Destroy			
		Casualty slaughter as long as pig can bear weight on all 4 legs and is willing to walk unaided and without being forced				
	Off back legs	Acutely lame	Lame sow			
Emaciated	Score 1, ribs visible	Destroy				
		Treat	Review after 7 and 14 days			
		Very thin sow				
Dystocia		Treat	Review when farrowing finished			
		If live pigs are present	Use a Doppler pregnancy tester consider destruction and immediate hysterectomy			
	The state of the s	Destroy	Note do not send a sow with			
		•	retained piglets for slaughter as it will be			
			condemned			
All pigs, wh	All pigs, which present with a condition that makes them unlikely to be slaughtered for human consumption should be destroyed as soon as this decision is reached.					
It is esser		therapy is used for each condities relevant withdrawal period ha	<u>. </u>			
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Euthanasia in pigs

Various euthanasia methods in swine

	Piglets <3 weeks old	Nursery pig < 10 weeks	Growing pig	Finishing pig	Mature Sow or boar
	Birth – 8 kg	8-30 kg	30 –65 kg	65 + kg	
Carbon dioxide	Yes	Yes	Not practical	Not practical	Not practical
Gunshot	No	Yes	Yes	Yes	Yes
Captive bolt	No	Yes	Yes	Yes	Yes
Electrocution	Yes	Yes	Yes	Yes	Yes
Blunt trauma	Yes	No	No	No	No
For veterinarians	only				
Anesthetic overdose	Yes	Yes	Yes	Yes	Yes

Carbon dioxide may be a suitable method to assist euthanasia of large groups of animals in the case of a serious disease outbreak.

Technical data:

Carbon dioxide

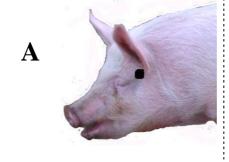
 CO_2 causes rapid onset of anesthesia with subsequent death due to respiratory arrest. CO_2 is heavier than air, therefore when constructing a container for swine euthanasia the outlet valve should be located at the top so that the container can be completely filled with CO_2 while air is allowed to escape. For small pigs a garbage can with the inlet and outlet valves installed in the lid plus a plastic bag liner can be used. After checking for complete euthanasia, the bag containing the pigs can be removed

Gunshot and penetrating captive bolt

Training in firearms is essential. The animal should be restrained by a rope or snare over the upper jaw held by an assistant. These methods stun or kill by concussive force and penetration into the brain. In larger animals, greater than 65 kg, it is recommended that the carotid (neck) artery is severed once the pig is stunned. The captive bolt should be positioned against the forehead as shown. A firearm must be held 5 to 30 cm from the skull (do not press against the forehead).

A indicates recommended position for temporal method – firearm only

B indicates recommended position for frontal method directed upwards at 20° towards the brain





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Electrocution

Electrocution induces death by insensibility of the brain followed by heart failure.

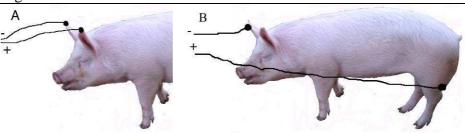
Electrocution is a two step procedure:

- 1. Pig rendered unconscious place electrodes on opposite sides of the head so that the current travels through the brain.
- 2. Pig euthanasia place electrodes so that the current is redirected through the heart of the unconscious pig

Large market weight hogs minimum current of 1.25A at 300v for 1 second

A indicates the correct position for Step 1 to render the pig unconscious

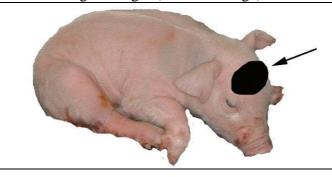
B indicates the correct position to induce heart fibrillation and death



Blunt trauma

A sharp, firm blow with a heavy blunt instrument on the top of the head over the brain is an efficient way of humanely killing pigs less than 8 kg in weight (4 weeks of age).

A sharp, firm blow with a heavy, blunt instrument on the top of the head. It is essential that the blow be administered swiftly, firmly and with absolute determination. If there is any doubt whether the pig is dead, the blow should be repeated. If necessary severe the carotid artery.



Decision tree towards care and management of compromised pigs

