



VETERINARY IRELAND

POSITION STATEMENT

ON THE

WELFARE OF PIGS

KEPT IN

INTENSIVE SYSTEMS

2017

AS RATIFIED BY THE
VETERINARY IRELAND NATIONAL COUNCIL
6TH September 2017



Veterinary Ireland Position Statement
on the
Welfare of Pigs
kept in
Intensive Systems 2017

Contents

Summary:	Page 3
Background:	Page 4
• The Irish Pig Industry	Page 4
○ <i>Animal health:</i>	Page 4
○ <i>Public health:</i>	Page 4
○ <i>Animal welfare:</i>	Page 5
• Mutilations:	Page 5
○ <i>Castration</i>	Page 5
○ <i>Tail Docking</i>	Page 5
○ <i>Allowing free movement</i>	Page 6
○ <i>Euthanasia of sick and lingering pigs</i>	Page 6
General Comments:	Page 7
Veterinary Ireland Policy on the Health and Welfare of Pigs:	Page 7
• The 5 Freedoms	Page 7
• Veterinary Ireland Policy	Page 8
Bibliography and references:	Page 10



Summary:

1. **Veterinary Ireland** calls for full enforcement of existing animal welfare legislation on the provision of space requirements for all ages of pigs to ensure an end to the current overcrowded conditions on many pig farms.
2. **Veterinary Ireland** calls for full enforcement of the legal requirement to provide sufficient manipulable material for all pigs and so minimise the occurrence of tail biting and the necessity for tail docking.
3. **Veterinary Ireland** calls for more animal welfare inspections of pigs by veterinarians as a means of dealing with animal welfare problems in the Irish pig industry. Veterinary Ireland calls for the implementation of the EU Commission Recommendation 2016/336 requiring risk assessment of tail-biting on pig farms based on animal and environmental indicators and calls on the Department of Agriculture, Food and the Marine (DAFM) to actively include the veterinary profession in the performance of these assessments and the development of measures on Irish pig farms to comply with legal welfare requirements.
4. **Veterinary Ireland** calls on the government to lobby for full implementation of Council Directive 2008/120/EC, which requires pig farmers to provide environmental enrichment for their pigs and prohibits the routine tail-docking of pigs throughout all EU member states and to promote the uptake of measures identified in the EU Overview report on Study Visits on Rearing Pigs with Intact Tails.
5. **Veterinary Ireland** calls for full enforcement of the legislative requirement for the feedback of slaughterhouse health and welfare information to producers and their private veterinary practitioners (PVPs). Veterinary Ireland calls for slaughterhouse operators and the DAFM to assist with the electronic recording of slaughterhouse health data in order to positively assist with health and welfare planning at farm level.
6. **Veterinary Ireland** calls on veterinary practitioners and specialist pig practitioners in particular, to review their adherence to their ethical obligations to promote and safeguard the health and welfare of the animals under their care. **Veterinary Ireland** urges practitioners to actively engage with their clients to ensure that farmers are fully aware of all their obligations in respect of animal welfare and to assist in education of farmers in correct procedures as required. Veterinary Ireland calls on the DAFM to ensure the formal training and certification of all persons carrying out euthanasia of pigs on farms.
7. **Veterinary Ireland** calls on the DAFM and other pig industry stakeholders to support implementation of the recommendations of the Report on the Pig Industry Stakeholder Group published in January 2016. **Veterinary Ireland** calls on the DAFM to provide targeted supports to assist farmers in making the necessary changes required to ensure good animal welfare, such as improvement of farm buildings and facilities.
8. **Veterinary Ireland** supports the Teagasc Pig Advisory group in their work to promote animal health and welfare and seeks to strengthen collaborative work between the veterinary profession and Teagasc advisors and researchers.
9. **Veterinary Ireland** calls on the DAFM to extend the Knowledge Transfer scheme to the pig farming sector.
10. **Veterinary Ireland** calls on the pig sector to consider introducing a scheme where high welfare product is identified and a bonus is paid to the producer



Background:

The Irish pig industry:

The pig industry in Ireland is the third most important agricultural sector after dairy and beef production, comprising 8% of gross agricultural output. Commercial pig farming is a small, intensive industry in Ireland with approximately 290 farms producing the majority of product, although there are more than 2000 active pig herds according to the most recent pig census data (DAFM, 2016). Approximately 95% of pigs are kept in herds of 1000 pigs or over and a total of 43 herds in 2015 kept over 10,000 pigs. The latter herds accounted for over 42% of the pig population. The proportion of pigs kept in large herds in Ireland is among the highest in Europe, with a majority of herds of the breeder-finisher type (Eurostat 2014 report). A high proportion of Irish pig farmers that own smaller units are part-time. Almost all pigs in Ireland are bred and reared indoors on slatted or solid floor systems. The industry achieves outputs of 24.8/pigs/sow/year, an increase from 21.9 in 1990 (McCutcheon, 2016). As stated in the Eurostat report, volatility and high prices of cereals and compound feeds cause difficulty in the pig industry throughout Europe and have forced some farmers out of business. Irish pig farmers are particularly vulnerable in this regard as almost all pig feed is imported and thus incurs additional transport costs. This likely explains in part the large size of commercial pig farms in Ireland as farmers try to achieve economies of scale. The majority of Irish product is exported to the UK (40%); about 35% goes to continental Europe and the remainder to international markets including growing exports to China.

Irish pig production faces a number of challenges which are listed in the recent report of the pig industry stakeholder group (Anon., 2016). These include problems relating to both animal and public health and to animal welfare. Old infrastructure comprising buildings of different designs, significant overcrowding and high levels of slatted flooring contribute to difficulties in addressing these problems. The issues are outlined in more detail below:

Animal health:

Gastrointestinal infections, lameness and respiratory infections are the most significant causes of disease in pigs in Ireland and account for high levels of antimicrobial use in piglets and weaned pigs (Vale et al., 2016, IPVS). Few data on respiratory lesions at slaughter are available for Irish pigs but a small study of over 4000 pigs from 26 herds reported that lesions of enzootic pneumonia were present in 58% of carcasses and pleuritic lesions were observed in 43% (van Staaveren et al., 2016). Although differences in methodology make comparisons difficult, these figures suggest that respiratory disease may be more prevalent in Irish pigs than in many other European countries.

Prevalence of lameness was unacceptably high at 28% in finishers at 18 weeks of age, 37% in finishers of 22 weeks of age, 39% in replacement gilts and 48% in pregnant gilts and pregnant sows in studies conducted in Teagasc (Boyle, 2013).

Public health:

One of the major public health issues for the Irish pig industry is the high prevalence of *Salmonella* in pig herds. Pig products are among the most significant sources of human salmonellosis and the prevalence of *Salmonella* on pig carcasses in Ireland is among the highest in Europe (Pires et al., 2014; EFSA, 2008). Given the known association between stress and *Salmonella* shedding and disease, it is likely that other problems of disease and welfare in Irish pigs contribute to the high levels of *Salmonella* detected.

Large animal-associated methicillin-resistant *Staphylococcus aureus* (LA-MRSA) is a public health issue that has emerged worldwide in the last 10 years for those working with pigs and to a lesser extent for the wider community. Although there are no figures on the prevalence of LA-MRSA in Ireland, it has been documented in Irish pigs (Brennan et al., 2016).

Other emerging public health concerns related to the pig industry worldwide and in Ireland include pigs as a source of *Clostridium difficile* and Hepatitis E.



Animal welfare:

Animal health is inextricably linked with animal welfare as disease will inevitably lead to compromised welfare. Thus, high levels of gastrointestinal and respiratory disease and lameness in some Irish pig herds leads to poor welfare in affected animals. It is noteworthy that anecdotal evidence of specialist pig veterinarians suggests that herds with high health status have fewer welfare problems, including reduced levels of vices.

Other issues apart from poor health which have important effects on welfare include:

- Mutilations – tail docking, tooth clipping/grinding, castration
- Provision of effective environmental enrichment
- Allowing free movement
- Euthanasia of 'hopeless cases'

Mutilations:

Castration

Castration of male piglets is not practised in Ireland although this procedure is still carried out in some EU countries.

Tail docking

Pigs are intelligent, inquisitive animals and rooting behaviour is part of their natural repertoire. Provision of manipulable materials such as straw allows pigs to perform rooting behaviour but providing straw in intensive housing systems on slatted or concrete flooring is difficult as it increases labour costs and results in problems with slurry disposal. Tail biting and other behaviours such as ear and flank biting which occur in intensively reared pigs are thought to be due in large part to frustration of the normal investigative behaviour of pigs (EFSA, 2007). The problem of tail biting, is however, multifactorial and other factors such as competition for feed, poor health, genetic and environmental factors also contribute. EU Commission Recommendation 2016/336 states that member states should ensure that farmers undertake a risk assessment of the incidence of tail biting in pigs on their farms based on animal and non-animal indicators.

Tail docking is performed under current intensive housing and rearing conditions to prevent tail biting and evidence suggests that it is partially effective in doing this. However, routine tail docking and reduction of corner teeth has been banned within the EU since 2008 (Council Directive 2008/120/EC). The directive states that manipulable material must be provided and that "Before carrying out these procedures [tail docking and tooth clipping], other measures shall be taken to prevent tail-biting and other vices, taking into account environment and stocking densities. For this reason, inadequate environmental conditions or management systems must be changed". In spite of the fact that the ban on routine tail docking has been in place for many years, compliance with the directive is low in most countries of the EU (Anon., 2014). Inspections by the Food and Veterinary Organisation in 2014 revealed that only 6 countries were compliant with the directive and 17 countries were not. Information was not available for 5 countries, which included Ireland, but a study by Compassion in World Farming conducted in 2013 revealed 100% prevalence of tail docking in Ireland. This is supported by Harley et al. (2012) who reported that over 99% of almost 37,000 pigs examined at slaughter in Ireland and Northern Ireland had been tail docked.

Tail biting results in extremely poor welfare for the bitten pig as it causes immediate pain and frequently leads to infection, causing further health and welfare problems. It also causes financial losses for the farmer due to abscess formation and partial or total carcass condemnation (D'Eath et al, 2016). Harley et al. (2014) estimated financial losses due to tail biting in Irish pigs at €0.59 per study pig, representing a loss of 43% of the profit margin per pig, at the time of the study, attributable to tail biting. D'Eath et al. (2016) modelled four different scenarios comprising 1) standard systems with docking, 2) standard systems without docking, 3) a system without docking in which space allowance was increased and some straw provided and 4) a system without docking, a further increase in space allowance and greater



amounts of straw provided. Their analysis showed that the first scenario provided the highest gross margin with the lowest levels of tail biting. In this comprehensive economic and ethical review of tail docking these authors concluded that without changing current management and housing systems, a total ban on tail docking would lead to increased levels of tail biting. Although only a proportion of pigs suffer tail biting when tails are undocked, the pain and possible complications suffered by these pigs are likely to outweigh the short-term pain suffered by all pigs when all tails are docked. However, as stated by the authors, tail docking does not address the underlying failure of current management systems to provide for the pigs' natural motivation to forage and root and thus current systems should be changed. However, this would require that consumers be willing to pay the increased costs.

A recent EU study (Anon., 2016) during which national experts visited three countries (Sweden, Finland and Switzerland) where pigs are not docked, concluded that docking is not unavoidable under intensive husbandry systems. Similar to statements by D'Eath et al. (2016), the experts agreed that mutilations mask problems of management and husbandry and that correction of these problems would address the underlying causes of tail biting. The examination of the systems in place in the three countries visited showed that good management of enrichment materials, feed, air quality, competition between animals and health status greatly contributed to ensuring low levels of tail biting in undocked pigs. In addition, rapid identification and removal of tail biters was required. Importantly, the study also concluded that maintenance of good welfare required on-going support to farmers from advisory organisations and private veterinarians together with funding provided by various Government welfare schemes.

Allowing free movement

The Irish pig industry is fully compliant with group housing of dry sows as required under Directive 2008/120/EC on the protection of pigs, in force since 2013. However, the vast majority of sows are confined when in the farrowing house and thus natural nest-building and farrowing behaviour cannot be performed. Considerable research is ongoing on free farrowing systems but the UK Farm Animal Welfare Council (2015) concluded that sufficient data are not yet available and commercial developments are not yet sufficiently advanced to allow recommendation of compulsory replacement of farrowing crates.

Provision of sufficient space for all ages of pigs is an important welfare requirement and is governed by EU and national legislation (Animal Health and Welfare Act, 2013; Council Directive 2008/120/EC). Overcrowding is a problem on some Irish farms, due to factors such as old infrastructure and lack of investment and because of increasing litter sizes. Overcrowding can lead to increased levels of disease, poor hygiene, reduced pig comfort and increased levels of vices such as tail, ear and flank biting.

Euthanasia of sick and lingering pigs

The Pig Veterinary Society in the UK have produced guidelines on treatment of the casualty pig (<http://www.pigvet soc.org.uk/files/document/192/Casualty%20Pig%20-%20April%202013-1.pdf>). These describe in detail the circumstances in which euthanasia should be carried out and humane methods of doing so. Anecdotal evidence suggests that, in common with their counterparts in other countries, some Irish farmers are reluctant to euthanize pigs. This results in the morally unacceptable situation, which is also illegal (Section 12, Animal Health and Welfare Act 2013), where severely diseased or injured pigs are left to suffer with no hope of recovery. Reasons for the reluctance to euthanize may include: holding onto the faint hope of the animal recovering; lack of knowledge or awareness; lack of training and equipment; lack of empowerment; shirking or repugnance of killing; and moral food conviction, i.e. an abhorrence of wasting an animal for use as food (Gemus-Benjamin et al., 2015). Identification of pigs for euthanasia should be performed daily on pig farms in most instances. Euthanasia of these pigs must be performed by a person competent to do so (as required under Regulation (EC) 1099/2009). The humane killing of a pig, particularly an adult pig, is difficult and requires expert training and appropriate equipment. Veterinary Ireland calls on the DAFM to ensure the formal training and certification of all persons carrying out euthanasia of pigs on farms.



General Comments:

Considerable data are available within the EU and worldwide on the factors affecting the occurrence of health and welfare problems in pigs. In addition, data specific to the Irish pig industry are increasingly available. Although full information is not available on all aspects, approaches that can be used to mitigate or solve these problems are known and relevant EU legislation is already in place to address the issues in many instances. Thus, persistence of problems appears to be associated with lack of enforcement and failure to change the management practices and culture within the pig industry. The lack of change is only partly due to economic constraints on pig farmers and unwillingness of consumers to pay increased prices for meat.

The Report of the Pig Industry Stakeholder Group published at the beginning of 2016 lists a series of recommendations on all aspects of the Irish pig industry, many of which address the issues raised in this position statement. A follow-up group to implement the recommendations was established.

Veterinary Ireland Policy on the Health and Welfare of Pigs:

- Veterinary Ireland acknowledges that pig farmers and pig veterinary practitioners in Ireland wish to safeguard and promote the welfare of pigs under their care.
- Veterinary practitioners are charged with an enhanced duty of care towards all animals and thus, it is the policy of Veterinary Ireland to promote change in the industry in order to eliminate poor welfare standards in intensively reared pigs.
- Full enforcement of existing legislation is needed; anecdotal evidence suggests that regulatory inspections may be overlooking some of the major welfare issues in the industry.
- Membership of quality assurance schemes such as the Bord Bia or Red Tractor schemes requires veterinary certification and more farm visits by veterinarians which helps to ensure the welfare of the pigs. However, there is an unwillingness to pay for such visits on the part of some farmers. This unwillingness to pay for professional services may also be responsible in part for the relatively fewer veterinarians serving the pig industry in Ireland: 1 veterinarian per 45000 to 50000 sows versus 1 veterinarian per 20000 sows in the UK.

The '**5 freedoms**' set out the basic requirements for ensuring the welfare of animals:

1. Freedom from hunger and thirst. Easy access to fresh clean water and a balanced ration which maintains full health and vigour.
2. Freedom from discomfort. Provision of a suitable environment and a comfortable resting area. For intensively reared pigs, this means providing adequate space for each pig while resting and feeding, and a comfortable environment with access to manipulable materials.
3. Freedom from pain, injury and disease. Prevention where possible and prompt diagnosis and proper treatment.
4. Freedom to express normal behaviour. Provision of sufficient and appropriate space, interest and the company of other pigs.
5. Freedom from fear and distress. Caring stockmanship, constant comfortable environment and freedom from aggression by other pigs.



Veterinary Ireland Policy:

1. Veterinary Ireland calls for full enforcement of existing animal welfare legislation on the provision of space requirements for all ages of pigs to ensure an end to the current overcrowded conditions on many pig farms.
2. Veterinary Ireland calls for full enforcement of the legal requirement to provide sufficient manipulable material for all pigs and so minimise the occurrence of tail biting and the necessity for tail docking.
3. Veterinary Ireland calls for more animal welfare inspections of pigs by veterinarians as a means of dealing with animal welfare problems in the Irish pig industry. Veterinary Ireland calls for the implementation of the EU Commission Recommendation 2016/336 requiring risk assessment of tail-biting on pig farms based on animal and environmental indicators and calls on the Department of Agriculture, Food and the Marine (DAFM) to actively include the veterinary profession in the performance of these assessments and the development of measures on Irish pig farms to comply with legal welfare requirements. It is suggested that regular risk assessment for poor animal welfare should be conducted with identification of the three highest risks to animal welfare on the unit. This should be followed by drawing up of recommendations to improve the three issues identified.
4. Veterinary Ireland calls on the government to lobby for full implementation of Council Directive 2008/120/EC throughout all EU member states and to promote the uptake of measures identified in the EU Overview report on Study Visits on Rearing Pigs with Intact Tails.
5. Veterinary Ireland calls for full enforcement of the legislative requirement for the feedback of slaughterhouse health and welfare information to producers and their PVPs. Veterinary Ireland calls for slaughterhouse operators and the DAFM to assist with the electronic recording of slaughterhouse health data in order to positively assist with health and welfare planning at farm level. Recording and feedback of pathological data (pleurisy / peritonitis / abscessation / tail biting lesions, etc.) will greatly assist with health and welfare planning at farm level. Immediate and accurate feedback is a useful management tool for the producer and PVP.
6. Veterinary Ireland calls on veterinary practitioners and specialist pig practitioners in particular, to review their adherence to their ethical obligations to promote and safeguard the health and welfare of the animals under their care. Veterinary Ireland urges practitioners to actively engage with their clients to ensure that farmers are fully aware of all their obligations in respect of animal welfare and to assist in education of farmers in correct procedures as required. This includes the obligation to educate their clients on the care of sick and injured pigs and insist on prompt euthanasia where required to prevent animal suffering. Identification of pigs for euthanasia should be performed daily in most instances and animal health reviews with the veterinarian must be undertaken regularly. Veterinary Ireland calls on the DAFM to ensure the formal training and certification of all persons carrying out euthanasia of pigs on farms.



7. Veterinary Ireland calls on the DAFM and other pig industry stakeholders to support implementation of the recommendations of the Report on the Pig Industry Stakeholder Group published in January 2016. Veterinary Ireland calls on the DAFM to provide targeted supports to assist farmers in making the necessary changes required to ensure good animal welfare, such as improvement of farm buildings and facilities.
8. Veterinary Ireland supports the Teagasc Pig Advisory group in their work to promote animal health and welfare and seeks to strengthen collaborative work between the veterinary profession and Teagasc advisors and researchers. Veterinary Ireland supports Teagasc in the running of pig farmer discussion groups as a forum to improve farmer understanding of the close relationship between animal and public health and animal welfare and to drive the changes necessary for improvement of the welfare of Irish pigs.
9. Veterinary Ireland calls on the DAFM to extend the Knowledge Transfer scheme to the pig farming sector.
10. Veterinary Ireland calls on the pig sector to consider introducing a scheme where high welfare product is identified and a bonus is paid to the producer. An advertising and educational campaign for consumers would be required to justify the higher cost of such product.



Bibliography and references:

Anon. (2014). Routine tail docking of pigs: a study for the PETI committee. Available at: [http://www.europarl.europa.eu/RegData/etudes/STUD/2014/509997/IPOL_STU\(2014\)509997_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2014/509997/IPOL_STU(2014)509997_EN.pdf)

Anon. (2016). Overview report on a series of study visits carried out between 25 January and 8 April 2016 in order to share good practice on rearing pigs with intact tails. Available at: http://ec.europa.eu/food/audits-analysis/overview_reports/details.cfm?rep_id=101

Boyle (2013). Preventing lameness in Irish pigs, Technology update, Teagasc, Project number 6026. Available at: <https://www.teagasc.ie/media/website/publications/2013/2925/6026.pdf>

Brennan GI, Abbott Y, Burns A, Leonard F, McManus BA, O'Connell B, Coleman DC, **Shore AC**. (2016). [The Emergence and Spread of Multiple Livestock-Associated Clonal Complex 398 Methicillin-Resistant and Methicillin-Susceptible *Staphylococcus aureus* Strains among Animals and Humans in the Republic of Ireland, 2010-2014.](#) PLoS One. 2016 Feb 17;11(2):e0149396.

D'Eath, R.B., J. K. Niemi, B. Vosough Ahmadi, K. M. D. Rutherford, S. H. Ison, S. P. Turner, H. T. Anker, T. Jensen, M. E. Busch, K. K. Jensen, A. B. Lawrence and P. Sandøe. (2016). Why are most EU pigs tail docked? Economic and ethical analysis of four pig housing and management scenarios in the light of EU legislation and animal welfare outcomes Animal (2016), 10:4, pp 687–699

Commission Recommendation (EU) 2016/336 of 8 March 2016 on the application of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs as regards measures to reduce the need for tail-docking. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.062.01.0020.01.ENG&toc=OJ:L:2016:062:TOC (accessed 01/02/2017)

EU Commission staff working document on best practices with a view to the prevention of routine tail-docking and the provision of enrichment materials to pigs, March 2016
Available at: https://ec.europa.eu/food/sites/food/files/animals/docs/aw_practice_farm_pigs_stfwrkdoc_en.pdf
(accessed 01/02/2017)

Edwards, S., 2011. TECHNICAL REPORT submitted to EFSA Preparatory work for the future development of animal based measures for assessing the welfare of pigs Report 2: Preparatory work for the future development of animal based measures for assessing the welfare of weaned, growing and fattening pigs.

EFSA (2005). The welfare of weaners and rearing pigs: effects of different space allowances and floor types. Annex to the EFSA Journal (2005) 268, 1-19

EFSA (2007). Opinion on: Animal health and welfare in fattening pigs in relation to housing and husbandry. The EFSA Journal (2007) 564, 1-14

EFSA (2008) Report of the Task Force on Zoonoses Data Collection on the analysis of the baseline survey on the prevalence of Salmonella in slaughter pigs, Part A, The EFSA Journal (2008) 135,1-111.



FAWAC: Best Practice for the Welfare of Animals During Transport. Available at: <http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BestPracticeWelfareAnimalsTransport.pdf> (accessed 01/02/2017)

FAWAC: Code of Practice for the Welfare of Pigs. Available at: <http://www.fawac.ie/media/fawac/content/publications/animalwelfare/CodePracticePigWelfare.pdf> (accessed 01/02/2017).

FAWC Opinion on mutilations and environmental enrichment, 2011. Available at: <https://www.gov.uk/government/publications/fawc-opinion-on-pig-mutilations-and-environmental-enrichment> (accessed 01/02/2017)

Gemus-Benjamin M, Kramer S, Bratton A and Conklin T (2015) Stockpersons and the Humane Euthanasia of Swine. *MSU Pork Quarterly*. 2015 Volume 20.1

Harley S., S. J. More, N. E. O'Connell, A. Hanlon, D. Teixeira, L. Boyle (2012): Evaluating the prevalence of tail biting and carcass condemnations in slaughter pigs in the Republic and Northern Ireland, and the potential of abattoir meat inspection as a welfare surveillance tool. *Veterinary Record*, doi: 10.1136/vr.100986

Pig farming sector - statistical portrait 2014

Pig farming in the European Union: considerable variations from one Member State to another, Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Pig_farming_sector_-_statistical_portrait_2014

Pires SM, Antonio R. Vieira, Tine Hald, and Dana Cole (2014) Source Attribution of Human Salmonellosis: An Overview of Methods and Estimates, *Foodborne Pathogens and Disease*, 11 (9) 667-676

van Staaveren N, Vale AP, Manzanilla EG, Teixeira DL, Leonard FC, Hanlon A, Boyle LA³. Relationship between tail lesions and lung health in slaughter pigs. *Prev Vet Med*. 2016 May 1;127:21-6. doi: 10.1016/j.prevetmed.2016.03.004.



**VETERINARY IRELAND
POSITION STATEMENT
ON
WELFARE OF PIGS
KEPT IN INTENSIVE SYSTEMS
2017**

**AS RATIFIED BY THE
VETERINARY IRELAND NATIONAL COUNCIL
6th September 2017**