



Humane Slaughter Association

## Media Release

28 March 2018

### **NEW RESEARCH AIMS TO FIND A MORE HUMANE WAY TO STUN PIGS**

***Humane Slaughter Association (HSA) joins forces with Defra to fund key research***

The Humane Slaughter Association (HSA) has jointly funded with the Department for Environment Food & Rural Affairs (Defra) a new two year programme of research to determine whether Low Atmospheric Pressure Stunning (LAPS) might be a more humane way to stun pigs during commercial slaughter.

LAPS stuns animals by gradually reducing the atmospheric pressure and hence the amount of oxygen available for animals to breathe. The joint funding by HSA and Defra will allow Dr Dorothy McKeegan at the University of Glasgow and colleagues at the University of Edinburgh and Scotland's Rural College (including former HSA Research Training Scholar, Dr Jessica Martin) to determine whether LAPS might be a more humane alternative to carbon dioxide stunning methods for pigs.

LAPS was initially developed and tested as a method for stunning chickens and the European Food Safety Agency's Panel on Animal Health and Welfare recently published a scientific opinion that LAPS is at least as humane as currently allowed methods of stunning (electrical waterbath and gas stunning) for broiler chickens, paving the way for regulatory approval and commercial use of LAPS in the EU.

LAPS mimics the reduction in pressure experienced when ascending to high altitude in an unpressurised aircraft. Military pilots are often exposed to low atmospheric pressures and do not report the experience as unpleasant. For this reason, LAPS is a promising method which may be able to render animals unconscious with less impact on their welfare than commonly used methods. Currently, it is common practice for the commercial slaughter of pigs to stun them by direct exposure to high concentrations of carbon dioxide (CO<sub>2</sub>), a method which is widely thought to compromise the animals' welfare. The use of CO<sub>2</sub> in high concentration is permitted under EU and national regulations and this method is used in the UK as well as other EU member states.

Dr McKeegan, who led the research projects which contributed to the approval of LAPS for poultry in the EU, will aim to establish whether pigs

show any signs of poor welfare when exposed to gradual decompression. The project will include assessments of pigs' physiological and behavioral responses when exposed to gradual reductions in atmospheric pressure, and these responses will be compared to those of pigs exposed to carbon dioxide to determine whether LAPS offers a more humane way to stun pigs. If the evidence from this project suggests that LAPS is more humane than carbon dioxide for pigs, as well as practically and economically viable, it is hoped that it will contribute towards regulatory approval and subsequent commercial adoption of LAPS.

Dr Robert Hubrecht, CEO and Scientific Director of the HSA said: "The HSA is delighted to be working with Defra to support this much needed work by Dr McKeegan to evaluate whether Low Atmospheric Pressure Stunning may be a more humane alternative to the current use of CO<sub>2</sub> for stunning pigs".

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**Note to Editors:**

The HSA is an independent charity recognised internationally for promoting scientific, technical and educational advances towards improving the welfare of food animals worldwide at slaughter, killing, marketing and transport.

The charity is also noted for its livestock expertise and provides education and training in the fields of transport, marketing and slaughter in the United Kingdom and around the world. Its work includes researching, refining and demonstrating humane slaughter methods, publishing material such as guidelines, best practice, books and videos, funding research projects and the development of equipment. Specialist technical staff provide expert and practical advice on all welfare issues relating to food animals.

The HSA is funded by voluntary donations, subscriptions and legacies.

For more information about the HSA's work call 01582 831919, email [info@hsa.org.uk](mailto:info@hsa.org.uk) or visit [www.hsa.org.uk](http://www.hsa.org.uk)

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