

3rd RSPCA international meeting - Focus on severe suffering Avoiding mortality

Summary report

In October 2019, the RSPCA, in association with the Biomedical Research Foundation of the Academy of Athens (BRFAA), brought together around 100 delegates from 16 countries to share knowledge and promote new approaches aimed at avoiding mortality in animals used in research and testing. This meeting followed on from successful events held in Brussels in 2016 and Berlin in 2017. The series of meetings forms part of the Society's pioneering initiative to help those involved in the regulation, care and use of laboratory animals to recognise and reduce the impact of procedures that may currently fall into the highest severity category.

The main programme was based on the content of a recent publication from RSPCA, LASA, LAVA and IAT entitled '[Avoiding mortality in animal research and testing](#)'. This report covers three main areas: reducing the numbers of animals 'found dead'; reducing unpredicted mortality of animals being used in procedures; and challenging perceived requirements for 'death as an endpoint' in studies and tests.

Held over two days, the event began with a welcome from Barney Reed of the RSPCA and an introduction from Dr Nikos Kostomitsopoulos from BRFAA. Speakers then shared ideas and expertise about a range of approaches to avoid mortality, including: reviewing and improving **welfare assessment** to enable better identification and implementation of early humane endpoints; the use of **pilot studies**; using **data mining** to analysis and identify trends and issues relating to mortality of animals; improving **monitoring** of animals by using behavioural monitoring technology; and providing **veterinary and other support** to animals. Day One finished with presentations from two researchers involved in basic science who explained how they have successfully reduced severity and animal mortality in their own study areas - cardiac regeneration using stem cells, and neuropathic pain.

Day Two began with discussion of specific considerations where very young (**neonate**) or older (**aged**) animals are involved, and also particular issues associated with the use of **genetically altered animals** where high mortality or severe phenotypes are observed. There then followed breakout 'discussion sessions' where participants could choose the topics most relevant to their own work - either genetically altered animals; animals in regulatory toxicology; neonates; or the use of behavioural monitoring technology.

The event finished at the end of Day Two with presentations looking at some of the issues involved when trying to balance severity with scientific outcomes; the role of the Animal Welfare Body in helping to avoid severe suffering; how a good 'culture of care' within an institution can reduce impacts on animals; and a general discussion session.

Requests for the **presentations** from the event can be made via email to:
research.animals@rspca.org.uk

Some of the **key points** to come out of the meeting were as follows:

- It's good practice to assume that there is always more that can be done to refine early humane endpoints, reduce suffering or improve animal welfare.
- Lots of small improvements in the way that animals are cared for or used can collectively make a big difference to an animal's overall experience.
- Improved monitoring and welfare assessment of animals offers real scope for helping to reduce suffering and avoid mortality.
- Use of technology should be considered in welfare assessment, e.g. to monitor movement, body temperature or food intake, provided that this does not replace assessments by humans and does not involve increasing harms to animals.
- Everyone involved in undertaking or regulating toxicology studies should keep up-to-date with the latest guidelines from bodies such as the OECD so that the most refined methods can be followed, or current requirements (e.g. for 'death' as an endpoint) can be challenged.
- Moving towards tests that identify 'evident' toxicity (rather than acute toxicity for example) has potential benefit for the value of the studies as well as for animal welfare.
- Institutions should keep comprehensive and relevant records for animals in stock and undergoing procedures. Analysing these can identify reliable indicators of mortality, issues of concern or potential for improvements.
- There should be no 'acceptable' rates of mortality, either for specific lines or within particular procedures. Discussions should take place within institutions to agree the triggers for reviewing current procedures or practices.
- People of all roles within an institution should make particular efforts to share new approaches that contribute to reducing severity or avoiding mortality.

Further information

The summary and action points from the **first** and **second meetings** can be found here:
<https://science.rspca.org.uk/sciencegroup/severesuffering/resources/meetings>

Visit the RSPCA/LASA/LAVA/IAT 'Focus on severe suffering' **website** for the latest information and resources on this topic: www.rspca.org.uk/severesuffering

The RSPCA would like to thank all of the speakers at the meeting, and in particular Dr Nikos Kostomitsopoulos and colleagues at the Biomedical Research Foundation of the Academy of Athens (BRFAA) whose support enabled this event to take place.

This summary report has been produced by the RSPCA Research Animals Department.

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