Using animals in studies; a veterinary perspective





Why, what, when

- Efficacy studies. Target species.
- Duration of Immunity studies
- Residue studies
- Safety studies (systemic and local reactions, adverse events reporting).



The 3 R's Reduce. Refine. Replace.

- Mathematical modelling
- Experimental design e.g. SE 1942; different challenge doses, non-heat treated, unchallenged sentinels (not repeating control group for each question)
- Specialist statistical advice
- Better methodologies and technical advances (e.g. in analysis of vaccine candidates)
- Within Moredun Experiments and Ethics Committee



Legalisation

- Unnecessary suffering is illegal, unacceptable and the penalties are severe
- Home Office control
- Animals (Scientific Procedures) Act 1986

 (amended 2012 to transpose European Directive 2010/63/EU)



Legalisation

What is covered and how is it enforced......

- PPL, PIL and Establishment license
- What species, procedure
- Where
- Who (training)
- Severity limits, end points, prevent unnecessary suffering
- Home Office Inspector
- NVS (Named Veterinary Surgeon)
- NACWO (Named Animal Care and Welfare Officer)



Further information

A Guide for licence holders on the Operation of the Animals (Scientific Procedures) Act 1986

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116860/quick_start_guide.pdf



The Five Freedoms

- 1. Freedom from Hunger and Thirst by ready access to fresh water and a diet to maintain full health and vigour.
- 2. Freedom from Discomfort by providing an appropriate environment including shelter and a comfortable resting area.
- 3. Freedom from Pain, Injury or Disease by prevention or rapid diagnosis and treatment.
- **4. Freedom to Express Normal Behaviour** by providing sufficient space, proper facilities and company of the animal's own kind.
- **5. Freedom from Fear and Distress** by ensuring conditions and treatment which avoid mental suffering.



Reports and Legalisation

- Animals (Scientific Procedures) Act 1986
- The Brambell Report
 Welfare of Animals kept under Intensive
 Livestock Husbandry Systems, December 1965
- Farm Animal Welfare Advisory Committee
- Animal Welfare Act 2006
 (Duty of Care, Codes of Practice)

