

The legislation in the UK and Europe allows animals to be used in experiments under very precise terms. Animals may be subjected to pain providing there is a consequent equal benefit in terms of the data procured. So before any experiment can start it is subject to a cost/benefit analysis which must be accepted by the Inspectors as reasonable. The cost is the harm caused to the animal. **It has been widely debated but the Act under which we work now defines pain as ‘pain, suffering, distress or lasting harm’.** Hence it is not just physical pain that we have to contend with. In the US similar rules apply but they are administered within each institute by the IACUC’s. AAALAC International is the independent organisation which comes nearest to achieving parity across the states and increasingly world wide

**Pain in LA is banded as mild, moderate and substantial and each procedure or sum of procedures that the animal might experience is allocated a severity.** If that severity is breached then there is a legal obligation to kill the animal to prevent any further suffering. Ethically we work under a regime known as the 3 R’s, that is; Replacement. If the objective can be achieved without the use of animals, by in-vitro or ex-vivo work or computer simulation then animals cannot be used, no matter at what expense or inconvenience  
Reduction. We must use the minimum number of animals necessary to achieve our objective.  
Refinement. If procedures can be adapted to be less painful then the refined procedure must be used.

I see a lot of cows that I think look gaunt, under strain, harassed, anxious and in some cases I could almost imagine being clinically depressed. This is an interpretation of appearance and behaviour but I am not one who believes such emotions are limited to man. These are the opinions of the stockman/veterinarian in me. **In classification terms described above I would say some of the animals experience Moderate pain.**

The pathology reported in the Irish vet J reinforces what a painful procedure milking can be and the residual trauma it leaves. If cows are being subject to such a painful procedure for several minutes twice (or in some cases three times) daily for 300 or more days consecutively without respite then I can understand why the cows appear as they do. The pain definition which includes suffering, distress or lasting harm is a useful one to consider in this context.