

Refining experiments in fish: Pain assessment and management

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As fishes are now the second most numerous experimental animal group across Europe it is vitally important that we have a means of refining their welfare in the laboratory. Many routine procedures result in tissue damage which gives rise to pain. From a legal and ethical perspective, we should avoid, minimise and alleviate any pain in laboratory animals and fish are no exception. A plethora of studies have investigated indicators of pain in fish with most focussing on zebrafish. Behavioural signs can be used to recognise pain in zebrafish and a variety of pain-relieving drugs can be administered to effectively prevent or reduce responses to painful laboratory procedures.