

Welfare risk assessment plans – identification and characterization of potential risks and benefits

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From an ethical and legal point of view, ensuring animal welfare is imperative and a distinct scientific and societal goal. We are in need of science-based, objective frameworks to address animal welfare issues and to enable appropriate welfare management. 'Risk assessments' comprise the identification and characterization of potential risks and benefits for the welfare of animals. Risk assessment plans (RAPs) might be used as guidelines to address and improve circumstances, procedures and/or management strategies. Risks to welfare are identified based on the 'dynamic concept of animal welfare', which requires animals to be mentally and physiologically capable/able to react adequately to environmental challenges. Adequate reactions are seen as elements of an animal's natural behavioural repertoire. The capability/ability to display normal behavioural patterns allows the animal to adapt to the demands of the prevailing environmental circumstances and enables it to reach a state that it appraises as positive (modified and extended from Ohl and Van der Staay). A RAP characterizes the exposure of a defined target population to the potential risk factors and possible consequences thereof for the welfare of the population, using literature research and on site data collection. The potential impact of the identified risk factors is weighted by classification into four categories, each comprising four sources: (1) generalization (which part of the target population is exposed to potential risks); (2) duration of exposure to potential risks; (3) intensity of exposure to potential risks (ranging from mild to terminal); (4) probability of exposure to potential risks. Here we present the implementation of animal welfare risk assessment, using the example of a dog population housed in a research kennel. Even though this kennel fulfils all legal requirements for a research facility (including welfare-related requirements), we were able to identify (potential) risks to the welfare of the kept dogs, related to e.g. housing and management. We will highlight the advantages and challenges of a RAP while aiming at objectively assessing risks to welfare.