

International Workshop on Alternative Methods for Human and Veterinary Rabies Vaccine Testing

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Rabies in humans is a uniformly fatal disease, with infections killing over 70,000 people worldwide each year. In the U.S. and other developed countries, veterinary rabies vaccines have effectively eliminated the risk to humans from exposure to wildlife or domesticated animals. Globally, human rabies vaccines help protect those whose work puts them at greater risk of exposure. Determining the safety and effectiveness of rabies vaccines however, requires large numbers of laboratory animals and involves significant unrelieved pain and distress. A recent workshop organized by NICEATM, ICCVAM, and its international partners identified rabies vaccines as one of the highest priorities for the development of alternative test methods that could further refine, reduce, and replace animal use for potency testing. Accordingly, the International Workshop on Alternative Methods for Human and Veterinary Rabies Vaccine Testing, held in October, 2011, brought together international scientific experts from government, industry, and academia to review alternative potency test methods and to define efforts necessary to achieve their global acceptance and implementation. Workshop participants provided recommendations for alternative methods to the currently used mouse *in vivo* vaccination-challenge test. These recommendations included continued validation of mouse serological methods, continued development of *in vitro* antigen quantification methods, and identification of the most appropriate source(s) for reference reagents. Implementation of the workshop recommendations is expected to advance the use of alternative methods for rabies vaccine potency testing while ensuring continued protection of human and animal health. ILS Staff supported by NIEHS contract N01-ES-35504.