

COMMITTEE ON LEGAL ISSUES PERTAINING TO ANIMALS

H.R. 4269 Rep. Bob Filner

An Act to amend title 10, United States Code, to require the Secretary of Defense to use only human-based methods for training members of the Armed Forces in the treatment of severe combat and chemical and biological injuries.

Battlefield Excellence through Superior Training Practices Act ('Best Practices Act')

THIS BILL IS APPROVED

The Best Practices Act ("Act") proposes a complete phase-in of human-based training methods in place of the current use of live animals in military medical training courses. The Act would require a complete phase-in of human-based methods for the training of the management of hemorrhage from extremity wounds, sucking chest wounds, airway compromise, and other combat trauma injuries in courses funded by the Department of Defense by October 1, 2013. The Act further requires an immediate phase-in of human-based training methods for chemical and biological casualty management training. Obvious ethical considerations involved in animal use in chemical casualty care and combat training courses, as well as the existing superior-based training methods which would replace the current training now considered to be outdated and ineffective favor the enactment of the Act.

Congressional Findings Stated in the Act

Section 2 of the Act sets forth six findings which form the rationale for the proposed legislation, as follows:

- (1) The Department of Defense has made impressive strides in the development and use of methods of medical training and protection of members of the Armed Forces, such as the use of tourniquets and improvements in body armor, that have likely led to decreased battlefield fatalities.
- (2) The Department of Defense uses live monkeys to train medical personnel to treat casualties of chemical and biological agent attacks and uses live goats and pigs to teach physicians, medics, corpsmen, and other personnel methods to respond to severe battlefield injuries.

- (3) The civilian sector has almost exclusively phased-in the use of superior human-based training methods for numerous medical procedures currently taught in military courses with the use of animals.
- (4) Human-based methods have been developed and validated for training responses to common battlefield injuries and chemical and biological agent attacks.
- (5) Management of hemorrhage, sucking chest wounds, airway compromise, and many other combat trauma injuries can be taught using numerous medical simulators and partial task trainers.
- (6) Entirely human-based curricula (consisting of medical simulation and moulage training sessions) for the management of patients exposed to biological and chemical agents are widespread in civilian hospitals.

DISCUSSION

Currently, chemical and combat casualty care training courses for military physicians, surgeons, medics, corpsmen, and infantry include the use of animals. The U.S military's current use of animals in chemical and combat care training programs includes courses conducted by the Army, Navy, Air Force, and Special Operations Command, as well as private contractors. In one form of chemical casualty management training, vervet monkey are given an overdose of the chemical physostigmine, which simulates exposure to a nerve gas by causing cholinergic intoxication. Some of the symptoms from this exposure include sever diarrhea, vomiting, severe bradycardia, and sometimes death. The animals involved are subjected to this procedure four times per year until they are reassigned to other research protocols. In some training labs, the animals are subjected to this procedure up to six times a year. Repeated exposure to these procedures are known to cause serious complications, and can result in death.

The U.S. military's use of animals in combat trauma training courses primarily includes courses conducted by the Army and Special Operations Command. The ethical considerations are evident in the descriptions of these courses where the legs of live goats are amputated one by one to cause severe hemorrhaging. In other combat casualty care training courses, pigs are subjected to gunshot wounds while trainees attempt to keep the animals alive, resulting in prolonged suffering and death. A Navy corpsman, quoted in a 2006 article in *The New York Times*, described how he was assigned to keep an anesthetized pig alive as he was subjected to horrendous injuries. He reported that every time he attempted to help the pig, others would wound him again. Ultimately, "they shot him twice in the face with a 9-millimeter pistol, and then six times with an AK-47 and then twice with a 12-gauge shotgun. And then he was set on fire."

¹ U.S. Army Medical Research Institute of Chemical Defense. "Chemical Casualty Care Resuscitation Practical Exercise Using Nonhuman Primate Model." 7 (Nov. 2005): 3, 5.

The corpsman further reported that he kept this pig alive during this ordeal for 15 hours.³

This bill is welcome for several reasons. First, the mandates of the Animal Welfare Act ("AWA"), regulating the use of animals in experiments, which are applied to all Department of Defense activities involving animals, have presented problems in interpretation and enforcement, despite their well intentioned goals. Certain statutory provisions leave open to interpretation the issue of what constitutes "humane" treatment of animals. In fact, several of the stated purposes of the AWA involve treating animals humanely, however the statute does not specify what this treatment actually entails.⁵ Another key term not defined by the statute is "scientific necessity." Thus, a provision of the AWA which provides that "facilities must not use an animal in more than one major operative experiment from which recover, unless the case is one of "scientific necessity," leaves vast room for interpretation.⁶

Further, Federal law requires research facilities to create Institutional Animal Care and Use Committees ("IACUC's") to oversee the facility's compliance with the AWA in order to prevent unnecessary suffering and promote alternative research. However, a 2005 report by the United States Department of Agriculture's Office of the Inspector General, noted repeated failures of the IACUC's to detect, report, or correct serious problems in research programs.

Additionally, the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM), established in 2000 has serious limitations. 8 First, as it deals specifically with toxicological testing, it does not address the concerns presented in the "Best Practices Act." Further, although ICCVAM is composed of the heads of 15 Federal agencies, including the Department of Defense, it does not have the power to require agencies to adopt its

³ Chivers, C.J. "Tending a Fallen Marine, with Skill, Prayer and Fury." *The New York Times*, 2 Nov. 2006, *available* at http://www.nytimes.com (last visited, April 15, 2009).

⁴ 7 U.S.C.§ 2131 et seg. See also, U.S. Departments of the Army, Navy, Air Force, Defense Advance Projects Agency, and the Uniformed Services University of the Health Sciences. Army Regulation 40-33. The Care and Use of Laboratory Animals in DOD Programs. Paragraph 6b (16 February 2005).

⁵ Melanie L. Vanderau, Comment, Science At Any Cost: The Ineffectiveness and Under Enforcement of the Animal Welfare Act, 14 Penn St. Envtl. L. Rev. 721 (2006), citing, 7 U.S.C. § 2142, § 2131.

⁶ 7 U.S.C. § 2143(3)(D)(i).

⁷ http://http://www.nycbar.org/pdf/report/ChimpAct.pdf. U.S.D.A., Office of the Inspector General, Audit Report, "APHIS Animal Care Program Inspection and Enforcement Activities," Report No. 33002-3-SF, September 2005, p.ii, iii, and 19. The report included in its many critical findings that 1) the number of research facilities cited for violations of the Animal Welfare Act steadily increased during the period examined, 2) that "some IACUCs did not ensure that unnecessary or repetitive experiments would not be performed on laboratory animals," and that 3) facility inspections by IACUCs do not effectively monitor the "search for alternative research, veterinary care, review of painful procedures, and the researchers' use of animals.

 $^{^8}$ 114 Stat 2722. Public Law 106-545 (2000), 42 U.S.C. 201. $\it See, \, also, \, NICEATM$ -ICCVAM brochure (March 2009), available at http://iccvam.niehs.nih.gov/about/about-NICEATM.htm. (Last visited, April 16, 2010.) In 2000, the ICCVAM Authorization Act established the Interagency Coordinating Committee on The Validation of Alternative Methods (ICCVAM) as a permanent interagency committee of NIEHS. Section 3(b)(5) of the Act provides that one of the stated purposes of the act is to reduce, refine, or replace the use of animals in testing where feasible.

recommendations pertaining to the validation of a method. Finally, ICCVAM's process for reviewing and validating alternatives has been criticized, even by the SACATM's Five Year Plan Working Group (FYWG), for being slow and ineffective, resulting in a small quantity of alternative methods being validated and recommended to the scientific community.

The importance of this proposed legislation is highlighted by the conflict between the Joint Regulation of the Department of Defense and its actual practice with respect to its use of animals in chemical casualty care training and combat trauma training courses. Army Regulation 40-33, Secretary of the Navy Instruction 3900.38C, and Air Force Manual 40-401 (1), *The Care and Use of Laboratory Animals in DOD Programs* specifies that "alternative methods to the use of animals must be considered and used if such alternatives produce scientifically valid or equivalent results to attain the research, education, training, and testing objectives." Although research strongly demonstrates that the use of animals in these training courses is suboptimal, and that superior training methods exist, the Department of Defense has continued its attempt to justify the necessity of using animals, especially in the area of trauma and chemical warfare training. ¹²

On June 3, 2009, Charles J. Rosciam, M.H.A., a retired captain with the U.S. Navy's Medical Service Corps, and 16 other former military physicians, medics, and nurses, joined the Physicians Committee for Responsible Medicine ("PCRM") in filing a Petition for Enforcement with the Army Surgeon General to end the use of animals in the military's trauma and chemical casualty care training. The Petition also specified the existence of superior non-animal, human-based training methods, including the techniques developed by researchers with the Israel Defense Forces Medical Corps and Israel's Carmel Medical Center, such as lectures, simulation training, and the use of moulage, in which actors with applied makeup mimic the symptoms of chemical warfare casualties.¹³ The Petition also cited that similar models are used in numerous United States medical facilities to prepare personnel for mass casualty incidents in the care of a terrorist attack.¹⁴

The necessity of this proposed legislation is further emphasized by a review of the decision of

_

⁹ Id. *Sec.* 4(c) and 5(b).

¹⁰ SACATM Working Group for the NICEATM-ICCVAM Five-Year Plan (2007). "Review of the Draft NICEATM_ICCVAM Five-Year Plan." Available at http://ntp.niehs.nih.gov. (last visited, April 16, 2010).

¹¹ U.S. Departments of the Army, Navy, Air Force, Defense Advanced Research Projects Agency, and the Uniformed Services University of the Health Sciences, Army Regulation 40-33. *The Care and Use of Laboratory Animals in DOD Programs*. Section 5(b)(February 16, 2005).

¹² Department of Defense Animal Care and Use Programs: Fiscal Years 2004-2005, Section 1.2. This report provides a summary of DOD animal use. It also addresses the underlying rationale, or benefits, of this animal use and efforts by the DOD to implement animal use alternatives.

¹³ R.Rubinstein, *et al.* (2002). "Training Israel Medical Personnel to Treat Casualties of Nuclear, Biological and Chemical Warfare." *The Israel* Medical *Association Journal*, 4 (2002); *545-548*. *See also*, Haim Berkenstadt, *et. al.* (2003). "The Use of Advanced Simulation in the Training of Anesthesiologists to Treat Chemical War Casualties." *Anesthesia and Analgesia*, 96 (2003): 1739-1742.

 $^{^{14}}$ PCRM, Petition for Enforcement (June 3, 2009), *citing*, Pawloski, J. "Re: U.S. Military Training." E-mail to Ryan Merkley. 1 December, 2008.

Winter v. Natural Resources Defense Council, ("Winter II"), 129 S. Ct. 365 (2008), where a divided Supreme Court concluded that the public interest required that environmental concerns yield to national security. The Supreme Court reversed the Ninth Circuit that had agreed with the District Court in Natural Resources Defense Council, Inc. V. Winter ("Winter I"), and overturned all contested portions of a preliminary injunction issued by the District Court. This case is a troubling "example of unquestioned deference to an invocation of military necessity at the expense of the environment." The Supreme Court accepted the naval officers' testimony regarding the necessity of the training procedures and did not engage in considerations of the actual need for sonar use in the military action, summarily deciding that, "[t]he public interest in conducting training exercises with active sonar under realistic conditions plainly outweighs the interests advanced by the plaintiffs." The Supreme Court's deferential acceptance of the military's expertise without requiring any specific documentation, or evidence, illustrates their "belief that military concerns are ultimately more important than environmental ones," and further reinforces the relevance of specific Federal law in this area.

CONCLUSION

For the aforementioned reasons, the proposed bill would accomplish the important function of replacing the current use of live animals in military combat trauma training, chemical, and biological casualty management training with existing superior methods. Accordingly, the New York City Bar Association supports the proposed legislation, H.R. 4269.

¹⁵ Winter v. Natural Res. Def. Council, Inc. (Winter II), 129 S. Ct. 365, 378 (2008)

¹⁶ The action was commenced when the NRDC filed for a temporary restraining order against the Navy's use of mid-frequency active ("MFA") sonar in its planned 2006 Rim of the Pacific ("RIMPAC") training exercises, claiming that the Navy violated the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370 e [2000]).

¹⁷ Lisa Lightbody, Comment, Winter v. Natural Resources Defense Council, Inc., 33 Harv. Envtl. L. Rev. 593 (2009).

¹⁸ Winter II, 129 S. Ct. at 378.

¹⁹ Lightbody, Comment, 33 Harv. Envtl. L. Rev. at 600.