

July 29, 2013

The Honourable Robert Nicholson
 Minister of National Defence
 National Defence Headquarters
 Major-General George R. Pearkes Building
 Ottawa, Ontario
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Via e-mail: dnd_mdn@forces.gc.ca

Dear Minister Nicholson,

Thank you in advance for your time and congratulations on your new position. I am writing to you as a Canadian citizen on behalf of People for the Ethical Treatment of Animals (PETA), our more than 3 million members and supporters about an important matter related to military preparedness, compliance with federal regulations and animal protection.

On July 23, 2013, we learned from a Postmedia News article of a Department of National Defence (DND) briefing given to former defence minister Peter MacKay that defended the continued use of animals in trauma training and chemical attack drills.¹

As you may know, we previously corresponded with Mr. MacKay to ask that he replace the Canadian military's use of animals in these training exercises with superior humanlike simulators, rotations in hospitals, and other widely available non-animal teaching methods—a transition that would be consistent with international best practices and the guidelines of the Canadian Council on Animal Care (CCAC). In response to concerns from PETA and the public, the DND stated last year that, “the department is actively investigating alternate approaches to training healthcare professionals.”²

However, based on the recent news coverage, it appears that changes have not yet been implemented. We respectfully urge you to take decisive action to end this senseless cruelty and modernize the DND's training program.

¹ Berthiaume L. (2013, July 23). Military uses thousands of live animals every year for training, testing. *Postmedia News*. Retrieved July 25, 2013 from <http://www.canada.com/news/Military+uses+thousands+live+animals+every+year+training+testing/8698068/story.html>

² Boswell R. (2012, August 16). Canadian military ‘actively’ looking to end animal use in medical training. *Postmedia News*. Retrieved July 25, 2013 from <http://o.canada.com/2012/08/16/canadian-military-actively-looking-to-end-animal-use-in-medical-training/>

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I. Chemical Casualty “Live Agent Training”

Background

In January 2012, Mr. MacKay confirmed that Defence R&D Canada (DRDC) in Suffield, Alberta, uses animals in chemical casualty training,³ otherwise known as “live agent training”—which involves exposing live pigs to live chemical agents (e.g., mustard, VX, sarin) and biological stimulants in an attempt to train participants in casualty recovery, triage, treatment and decontamination procedures. We have obtained disturbing photos of these exercises showing pigs injected with toxic chemicals, doused by decontamination water guns, and suffering from bleeding wounds. During these exercises, pigs are forced to endure uncontrollable muscle twitching, irregular heartbeats, difficulty breathing, and possibly even death.

Animal Laboratories Inapplicable for Diagnosing Human Nerve Agent Victims

Not only are these exercises cruel, but using pigs for this program provides a suboptimal training experience due to drastic differences between the contrived animal laboratories and the real conditions in which military personnel treat human chemical attack victims.

Most importantly—unlike experience on human patient simulators and other human-based methods—practicing on pigs causes trainees to miss major clinical signs of nerve agent poisoning in humans, since pigs cannot speak in order to communicate key initial symptoms of chemical agent exposure, including chest tightness, nausea, dizziness, confusion, agitation and eye pain. In humans, by the time a nerve agent causes observable seizures, nerve damage could already be severe and soldiers and others may suffer more than they would have had the trainees learned using methods that prepared them to identify first subtle symptoms of human exposure that can’t be identified in animals who don’t speak our language.

“Live Agent Training” on Animals Violates CCAC Policy, Simulators are the Preferred Worldwide Standard

The Canadian military’s use of pigs for live agent training violates CCAC policy, which states, “Animals should be used only if the researcher’s best efforts to find an alternative have failed.”⁴ As we have previously outlined for Mr. MacKay, non-animal simulators are the international standard for civilian and military chemical casualty training because they better prepare medical providers to treat patients.

U.S. Army Ends Animal Use for Chemical Casualty Training Courses

In his e-mail to PETA dated June 25, 2012, Mr. MacKay attempted to dismiss the numerous viable alternatives to the use of animals in chemical casualty live agent training by arguing that the DRDC’s training is unique in that it is for specialists with the Canadian Forces and civilian first responders and focuses on scenarios that would exist in field conditions and would be encountered on specific missions. However, this is precisely the advanced type of training that the U.S. Army now provides without any use of animals to physicians, nurses, physician assistants, senior medical NCOs and many other kinds of medical professionals and civilians in its fully accredited Medical Management of Chemical and Biological Casualties (MCBC) course

³ MacKay P. E-mail to member of the public, 10 Jan. 2012.

⁴ Canadian Council on Animal Care. (1989) CCAC policy statement on: ethics of animal investigation. Retrieved July 25, 2013 from http://www.ccac.ca/en/standards/policies/policy-ethics_animal_investigation

that is taught at the U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) located at Aberdeen Proving Ground, and at the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) located at Fort Detrick, Maryland.

In 2011, the U.S. Army decided to completely cease animal use for the MCBC course, publicly stating on the White House Web site that, “On September 20th, 2011, the Army stated that it would no longer use monkeys as part of life-saving training at Aberdeen Proving Ground. This change was long planned, and was made possible by improved technology, the development of alternative training methods, shifting chemical threat environments, and changes in the medical competencies required of first responders during a chemical incident.”⁵ Because other U.S. military facilities already used simulators and other non-animal methods for this training, this change marked the end of animal use for chemical casualty training across the entire U.S. military.

As this is very comparable to DRDC’s chemical casualty training program, clearly the goals of such a course can now be met without the use of animals.

II. Combat Trauma Training

Background

The Postmedia News article also confirmed from the DND that the Canadian military uses “animals for training battlefield doctors on how to treat gunshot wounds, blast injuries and other trauma.”¹

Non-animal military trauma training methods are used instead of animals by NATO nations

The majority of Canada’s NATO allies do not use any animals for military medical training exercises. In August 2012, PETA U.S. and decorated military physicians published a study in *Military Medicine*, a peer-reviewed journal of the Association of Military Surgeons of the United States, showing that 22 of 28 NATO nations—including Albania, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, and Turkey—do not use any animals for military medical training.⁶

The NATO Centre of Excellence for Military Medicine (MILMED COE), based in Hungary and designated as the primary source of expertise for the NATO Alliance’s medical community charged with training medics and experts to plan medical support for NATO operations, has also confirmed that its Emergency Management of Battlefield Injuries course (EMBI) and its Major Incident Medical Management and Support (MIMMS) course do not use animals, writing, “MILMED COE does not use animals, alive or dead, or animal models for any training or course

⁵ Collins, T. (2011, September 20). *Army No Longer Using Monkeys as Part of Training at Aberdeen Proving Ground*. Retrieved on July 25, 2013 from <https://petitions.whitehouse.gov/response/army-no-longer-using-monkeys-part-training-aberdeen-proving-ground>

⁶ Gala, S. G., Goodman, J. R., Murphy, M. P., & Balsam, M. J. (2012). Use of Animals by NATO Countries in Military Medical Training Exercises: An International Survey. *Military Medicine*, 177(8), 907-910.

or is involved in any partner course doing so. Where needed for specific training (EMBI; MIMMS) appropriate human patient simulators are used.”⁷

Clearly, if nearly 80 percent of Canada’s NATO allies can train military medical personnel without the use of animals, the Canadian armed forces can do so, and should be required to pursuant to the CCAC’s policy on using non-animal methods when available.

Non-animal trauma training methods are more effective than animal laboratories

Peer-reviewed comparative studies have repeatedly found that, when compared to animal laboratories, non-animal trauma training models—such as lifelike human patient simulators—better equip civilian and military medical providers with the technical skills and psychological preparedness necessary to treat traumatic injuries in austere environments. This is because unlike pigs and goats—who are most commonly used in military training exercises—these human simulators faithfully replicate human anatomy and physiology and allow trainees to repeat procedures until they are confident and proficient.

Last year, researchers in the Department of Surgery at the University of Toronto published a study that found simulator-based trauma training was superior to animal-based training and that the simulator-based training was overwhelmingly preferred by students and instructors.⁸ As a result, the researchers ended animal use in their trauma program, stating, “[W]e could not justify identifying animals as the only suitable source for providing the necessary training in our ethics application for renewal.”¹² Today, every civilian trauma training program across Canadian uses non-animal simulation methods instead of animals.⁹

Similarly, a study published last year in the journal *Military Medicine* by trauma researchers at the Israeli Defense Force (IDF) Medical Corps examined military physicians’ and paramedics’ self-reported confidence in performing trauma procedures after practicing on various training modalities and found that, “Manikin and supervised and unsupervised patient experience exhibited positive associations with self-confidence, but (animal) model experience did not.”¹⁰

U.S. military experts have published research comparing the use of simulators versus pigs for teaching diagnostic peritoneal lavage (DPL), a procedure that military medics currently perform when trauma-related intra-abdominal bleeding is suspected and the injury occurs in an austere environment with limited equipment available. The researchers concluded: “The simulator group performed better on site selection ... and technique ... than those who trained on a pig. The finding that a simulator is superior to an animal model for teaching an important skill to medical students has profound implications on future training and deserves further study.”¹¹

⁷ MILMED COE. E-mail to PETA, 28 Oct. 2011.

⁸ Ali, J., Sorvari, A., & Pandya, A. (2012). Teaching Emergency Surgical Skills for Trauma Resuscitation-Mechanical Simulator versus Animal Model. *ISRN Emergency Medicine*, 2012.

⁹ Physicians Committee for Responsible Medicine. (2011) Canada ends cruel live animal labs. Retrieved July 29, 2013 from www.pcrm.org/media/news/canada-ends-cruel-live-animal-labs

¹⁰ Sergeev, I., Lipsky, A. M., Ganor, O., Lending, G., Abebe-Campino, G., Morose, A., ... & Glassberg, E. (2012). Training Modalities and Self-Confidence Building in Performance of Life-Saving Procedures. *Military medicine*, 177(8), 901-906.

¹¹ Bowyer, C. M. W., Liu, A. V., & Bonar, J. P. (2005). Validation of SimPL—a simulator for diagnostic peritoneal lavage training. *Studies in Health Technology and Informatics*, 111, 64-67.

Also relevant to this discussion, an international team of surgeons published a study in the *Journal of Trauma* that examined the efficacy of using a novel human cadaver-based trauma training method that incorporates circulation in the major vessels for practicing how to repair thoracic and abdominal cavity injuries involving the heart, lungs, liver, and major vessels while maintaining emergent airway control. The physicians concluded, “An alternative to living laboratory animals, this inexpensive and readily available model offers good educational value for the acquisition and refinement of surgical skills that are specific to trauma surgery.”¹²

Recent scientific and ethical reviews in Germany have deemed animal use unjustifiable

Officials in states across Germany—whose Armed Forces do not use any animals for medical training—have determined on multiple occasions that the use of animals for military medical training is not justifiable given the existence of superior non-animal alternatives. Specifically, German government authorities have repeatedly rejected applications for animal use for this purpose from the U.S. Army Europe (USAREUR) and private contractors on the grounds that the procedures would “violate host nation animal protection laws” because “effective alternatives to animals are available.”^{13,14} Further, in 2012, a panel of independent medical experts convened by a German court determined that using animals for this training is unjustifiable because superior alternatives like human simulators are available. The testimony—a transcript of which we would be pleased to share with you upon your request—prompted a U.S. military trauma training contractor to voluntarily withdraw a lawsuit seeking permission to use animals for this purpose.¹⁵

III. Conclusion

There is no scientific, ethical or legal justification for harming and killing animals in military trauma training exercises. The literature is clear about the superiority of non-animal training methods, and the use of these humane training methods instead of live animals by 22 NATO countries is evidence of their viability as full replacements for the use of animals in combat casualty training. This is not a choice between saving animals and saving human beings. Rather, we are advocating a switch to more modern and effective training tools that will better train surgeons, medics and first responders to save lives on the battlefield.

In accordance with CCAC policy, we ask that you end the Canadian military’s use of animals for combat casualty live tissue training in favor of the many effective non-animal methods available. We would be happy to put you in touch with civilian and military medical trauma training experts who can assist you in learning about the advantages offered by simulation technology.

¹² Aboud, E. T., Krisht, A. F., O’Keeffe, T., Nader, R., Hassan, M., Stevens, C. M., ... & Luchette, F. A. (2011). Novel simulation for training trauma surgeons. *The Journal of Trauma and Acute Care Surgery*, 71(6), 1484-1490.

¹³ Vandiver J. & Kloeckner M. (2010, August 17). German ruling puts USAREUR plans for live-animal medical training on hold. *Stars and Stripes*. Retrieved July 23, 2013 from <http://www.stripes.com/news/german-ruling-puts-usareur-plans-for-live-animal-medical-training-on-hold-1.114989>

¹⁴ Montgomery N. (2010, October 28). Germany again shoots down U.S. Army Europe's live-tissue training. *Stars and Stripes*. Retrieved July 23, 2013 from <http://www.stripes.com/news/germany-again-shoots-down-u-s-army-europe-s-live-tissue-training-1.123395>

¹⁵ Piggitt J-B. & Schneider C. (2012, October 2). Germany halts plan to shoot live pigs for paramedic training. *Stars and Stripes*. Retrieved July 23, 2013 from <http://www.stripes.com/news/europe/germany-halts-plan-to-shoot-live-pigs-for-paramedic-training-1.191572>

You can contact me directly by telephone at 202-829-0974 or by e-mail at AlkaC@peta.org. Thank you for your consideration of this important matter, and we look forward to your response.

Sincerely yours,

A handwritten signature in black ink that reads "Alka Chandna". The signature is written in a cursive style with a long, sweeping tail on the final letter.

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