

114TH CONGRESS  
1ST SESSION

# S. 587

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 injuries, and for other purposes.

---

## IN THE SENATE OF THE UNITED STATES

FEBRUARY 26, 2015

Mr. WYDEN (for himself and Mr. PETERS) introduced the following bill; which was read twice and referred to the Committee on Armed Services

---

## A BILL

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 injuries, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Battlefield Excellence  
5 through Superior Training Practices Act” or “BEST  
6 Practices Act”.

7       **SEC. 2. FINDINGS.**

8       Congress makes the following findings:

1           (1) The Department of Defense has made im-  
2           pressive strides in the development and use of meth-  
3           ods of medical training and troop protection, such as  
4           the use of tourniquets and improvements in body  
5           armor, that have led to decreased battlefield fatali-  
6           ties.

7           (2) The Department of Defense uses more than  
8           8,500 live animals each year to train physicians,  
9           medics, corpsmen, and other personnel methods of  
10          responding to severe battlefield injuries.

11          (3) The civilian sector has almost exclusively  
12          phased in the use of superior human-based training  
13          methods for numerous medical procedures currently  
14          taught in military courses using animals.

15          (4) Human-based medical training methods  
16          such as simulators replicate human anatomy and  
17          can allow for repetitive practice and data collection.

18          (5) According to scientific, peer-reviewed lit-  
19          erature, medical simulation increases patient safety  
20          and decreases errors by healthcare providers.

21          (6) The Army Research, Development and En-  
22          gineering Command and other entities of the De-  
23          partment of Defense have taken significant steps to  
24          develop methods to replace live animal-based train-  
25          ing.

1           (7) According to the report by the Department  
2 of Defense titled “Final Report on the use of Live  
3 Animals in Medical Education and Training Joint  
4 Analysis Team”, published on July 12, 2009—

5           (A) validated, high-fidelity simulators were  
6 to have been available for nearly every high-vol-  
7 ume or high-value battlefield medical procedure  
8 by the end of 2011, and many were available as  
9 of 2009; and

10          (B) validated, high-fidelity simulators were  
11 to have been available to teach all other proce-  
12 dures to respond to common battlefield injuries  
13 by 2014.

14          (8) The Center for Sustainment of Trauma and  
15 Readiness Skills of the Air Force exclusively uses  
16 human-based training methods in its courses and  
17 does not use animals.

18          (9) In 2013, the Army instituted a policy for-  
19 bidding non-medical personnel from participating in  
20 training courses involving the use of animals.

21          (10) In 2013, the medical school of the Depart-  
22 ment of Defense, part of the Uniformed Services  
23 University of the Health Sciences, replaced animal  
24 use within its medical student curriculum.

1           (11) The Coast Guard announced in 2014 that  
2 it would reduce by half the number of animals it  
3 uses for combat trauma training courses but stated  
4 that animals would continue to be used in courses  
5 designed for Department of Defense personnel.

6           (12) Effective January 1, 2015, the Depart-  
7 ment of Defense replaced animal use in six areas of  
8 medical training, including Advanced Trauma Life  
9 Support courses and the development and mainte-  
10 nance of surgical and critical care skills for field  
11 operational surgery and field assessment and skills  
12 tests for international students offered at the De-  
13 fense Institute of Medical Operations.

14 **SEC. 3. REQUIREMENT TO USE HUMAN-BASED METHODS**  
15 **FOR CERTAIN MEDICAL TRAINING.**

16           (a) IN GENERAL.—Chapter 101 of title 10, United  
17 States Code, is amended by adding at the end the fol-  
18 lowing new section:

19 **“§ 2017. Use of human-based methods for certain**  
20 **medical training**

21           “(a) COMBAT TRAUMA INJURIES.—(1) Not later  
22 than October 1, 2018, the Secretary of Defense shall de-  
23 velop, test, and validate human-based training methods for  
24 the purpose of training members of the Armed Forces in

1 the treatment of combat trauma injuries with the goal of  
2 replacing live animal-based training methods.

3 “(2) Not later than October 1, 2020, the Secretary—

4 “(A) shall only use human-based training meth-  
5 ods for the purpose of training members of the  
6 Armed Forces in the treatment of combat trauma  
7 injuries; and

8 “(B) may not use animals for such purpose.

9 “(b) EXCEPTION FOR PARTICULAR COMMANDS AND  
10 TRAINING METHODS.—(1) The Secretary may exempt a  
11 particular command, particular training method, or both,  
12 from the requirement for human-based training methods  
13 under subsection (a)(2) if the Secretary determines that  
14 human-based training methods will not provide an educa-  
15 tionally equivalent or superior substitute for live animal-  
16 based training methods for such command or training  
17 method, as the case may be.

18 “(2) Any exemption under this subsection shall be for  
19 such period, not more than one year, as the Secretary shall  
20 specify in granting the exemption. Any exemption may be  
21 renewed (subject to the preceding sentence).

22 “(c) ANNUAL REPORTS.—(1) Not later than October  
23 1, 2016, and each year thereafter, the Secretary shall sub-  
24 mit to the congressional defense committees a report on  
25 the development and implementation of human-based

1 training methods for the purpose of training members of  
2 the Armed Forces in the treatment of combat trauma inju-  
3 ries under this section.

4 “(2) Each report under this subsection on or after  
5 October 1, 2020, shall include a description of any exemp-  
6 tion under subsection (b) that is in force as the time of  
7 such report, and a current justification for such exemp-  
8 tion.

9 “(d) DEFINITIONS.—In this section:

10 “(1) The term ‘combat trauma injuries’ means  
11 severe injuries likely to occur during combat, includ-  
12 ing—

13 “(A) hemorrhage;

14 “(B) tension pneumothorax;

15 “(C) amputation resulting from blast in-  
16 jury;

17 “(D) compromises to the airway; and

18 “(E) other injuries.

19 “(2) The term ‘human-based training methods’  
20 means, with respect to training individuals in med-  
21 ical treatment, the use of systems and devices that  
22 do not use animals, including—

23 “(A) simulators;

24 “(B) partial task trainers;

25 “(C) moulage;

1                   “(D) simulated combat environments;  
2                   “(E) human cadavers; and  
3                   “(F) rotations in civilian and military trauma  
4                   centers.

5                   “(3) The term ‘partial task trainers’ means  
6                   training aids that allow individuals to learn or practice  
7                   specific medical procedures.”.

8                   (b) CLERICAL AMENDMENT.—The table of sections  
9                   at the beginning of chapter 101 of such title is amended  
10                   by adding at the end the following new item:

“2017. Use of human-based methods for certain medical training.”.

○