

Veterinarians find place in homeland security

Anthrax. Biological attacks. Exotic diseases. These and many other issues are making headlines as the world we live in seems to get smaller and smaller. There is a dedicated group of scientists confronting these, and many other threats every day.

Veterinary pathologists work to understand various diseases and biological compounds wherever our military are deployed around the world. They also are part of the Homeland Security Council and other government agencies, working closely with government officials to ensure that appropriate measures are in place to protect the military and citizens in the event of a biological threat.

Veterinary pathologists are critical on the frontlines of public health risks like agroterrorism or bioterrorism. The United States military certainly believes veterinary pathology is important. It maintains a cadre of veterinary pathologists in uniform who are working to limit the risk of infectious diseases to soldiers overseas.

From studying the basic mechanisms of exotic fevers, to the development of vaccines, disease control, risk management and rapid detection of biologic and chemical agents, Army veterinary pathologists are crucial members of the effort to protect our soldiers. Lt. Col. Dana Scott, director of the division of pathology at the Walter Reed Army Institute of Research and a diplomat in the American College of Veterinary Pathologists (ACVP), has studied Ebola virus in the famed "Hot Zone" and served for two years as special liaison for biological warfare to the Pentagon.

Veterinary pathologists also are working in federal and state diagnostic laboratories as well as with the United States Department of Agriculture (USDA) and will be the first to know about foreign animal diseases in our country that could devastate our agricul-

ture industry.

The USDA spends considerable effort and money keeping foreign diseases—some of which are less than 90 miles from our border—out of our country. Veterinary pathologists familiar with these diseases are busy working to improve detection and containment of this threat.

Veterinary pathologists research different diseases because there can be an outbreak at any time during a deployment, but they also conduct research because many diseases have the potential to be used as intentional weapons.

In 1991, a natural botulism outbreak occurred across Egypt. Veterinary pathologists in the military already had helped develop a vaccine and treatment for botulism to protect soldiers in the event of a natural or intentional attack.

When Operation Iraqi Freedom started, veterinary pathologists were sent with an army laboratory to Iraq in case of a biological weapon attack. When they began delving into research, they ended up working on ways to treat a parasitic disease spread by the bite of infected sand flies that turned out to be a significant problem for soldiers in Iraq and Afghanistan.

Veterinary pathologists also provide many other benefits for the military, from researching new bandages that soldiers can use on the battlefield to stop bleeding more effectively after a blast injury, to studying and developing new body armor, to caring for working military dogs when they are sick or injured.

For more information on the profession and other areas of public health served by veterinary pathologists, go to www.acvp.org. ◆

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