

Providing body armor to all US police officers is worth the cost, study finds

September 1 2010

Providing body armor to all law enforcement officers in the United States would provide enough benefit to justify the cost, according to a new RAND Corporation study.

Analyzing police officer shootings over a four-year period, the study found that wearing [body armor](#) more than tripled the likelihood that an officer would survive a shooting to the torso and estimated that providing such equipment to all officers nationally would save at least eight lives annually. While most police departments already use body armor, many still do not.

Considering the value of the life of an officer killed by gunfire, the study concludes that the benefits of providing body armor to all officers would be twice as large as the cost. The findings were published online by the *Journal of Occupational and Environmental Hygiene*.

"While it is well-known that body armor saves lives, we've never known just how effective it is," said Tom LaTourrette, the study's author and a senior scientist at RAND, a nonprofit research organization. "The additional cost of providing body armor to all [law enforcement](#) officers in the [United States](#) is more than justified compared to the savings that would be created by fewer serious injuries and officer deaths."

Body armor began to be used by law enforcement agencies in the United States during the middle of the 1970s and today about 75 percent of officers nationwide work in departments that require the equipment to

be worn while officers are on duty or in certain high-risk situations.

No high-quality studies have been done previously to examine the effectiveness of body armor among police officers.

LaTourrette examined 561 line-of-duty shootings involving police officers nationally between 2004 and 2007. Among the 262 torso shootings studied, officers who were not wearing body armor had a 68 percent chance of dying as compared to a 20 percent among those who did wear armor.

The study estimates that it costs \$112 per year to provide an officer with body armor. So outfitting the 236,000 police officers who do not have body armor would cost about \$26 million annually, while the study estimates the economic value of the lives saved each year at \$51 million.

The cost of providing [police officers](#) with body armor typically is shared by the federal government and local law enforcement agencies.

LaTourrette said more research is needed to understand how body armor can be made more effective. His analysis found that body armor was most often defeated when bullets entered between the side panels or struck an officer above or below the vest, but in some cases armor was penetrated by a bullet from a gun that exceeded the armor's rating.

Making body armor more effective will require balancing body area coverage and penetration resistance, while minimizing wearer discomfort and impeding officers' job performance.

The study draws on data gathered for previous RAND studies and was supported by discretionary funds within RAND Infrastructure, Safety and Environment. The project was conducted within the RAND Safety and Justice Program, which conducts public policy research on

corrections, policing, public safety and occupational safety.

Provided by RAND Corporation

Citation: Providing body armor to all US police officers is worth the cost, study finds (2010, September 1) retrieved 20 April 2024 from <https://phys.org/news/2010-09-body-armor-police-officers-worth.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.