

**Bulletproof Vest Partnership/Body Armor Safety Initiative:
Results of Body Armor Testing**

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Officer Christopher Ford owes his life to a bullet-resistant vest. A uniformed member of the Ozark, Alabama Police Department, Officer Ford was called out of bed one night to help pursue a violent felon who had shot one person, attempted to shoot another, and gone on a random shooting spree. As he left his house, his wife caught him and insisted that he put on his protective vest. Later, after a 90-minute car chase, he and his fellow officers managed to disable the suspect's vehicle. As he approached the car, the shooter fired with his .380 caliber handgun, striking Officer Ford several times. One bullet hit the center of mass—the area just below the navel—but was stopped by his vest. His fellow officers returned fire and killed the shooter. Thanks to his protective vest, Officer Ford was able to recover from the injuries he sustained and return to work.

Officer Ford is one of 2,900 law enforcement officers who have been protected by bullet-resistant armor. He also is one of 800,000 officers who put their lives at risk every day to protect America's communities. We owe it to him and his counterparts across the country to do what we can to make sure that they have up-to-date and accurate information about the effectiveness of the body armor they wear.

In our continuing effort to keep law enforcement officers informed about the effectiveness of body armor, the U.S. Department of Justice (DOJ) recently announced the results of tests that indicate that certain types of body armor vests may not maintain their ballistic performance. The Department has moved with deliberate speed to publicize these findings and is providing support to law enforcement agencies to help replace those vests.

The tests were part of DOJ's Body Armor Safety Initiative, launched in November 2003 in response to the shooting of a Forest Hills, Pennsylvania police officer who was seriously injured by a bullet that penetrated his vest. The vest was made of multiple layers of fabric woven from Zylon[®] yarn. Former Attorney General John Ashcroft called upon the National Institute of Justice (NIJ)—the research, development, and evaluation arm of DOJ—to initiate an examination of new and used Zylon[®]-based armor and to review NIJ's existing testing program for bullet-resistant armor. The initiative has been guided by recommendations from a summit convened by DOJ's Office of Justice Programs (OJP), at which representatives of federal, state, local, and tribal law enforcement agencies, law enforcement associations, manufacturers, and standards and testing organizations discussed issues related to body armor testing generally and Zylon[®]-based armor particularly.

Initial testing under the initiative found that ballistic materials, including Zylon[®], can degrade due to environmental factors, and that the upgrade kits did not appear to bring the

performance level of used armor up to that of new armor. Subsequent testing, which is detailed in the *Third Status Report to the Attorney General on Body Armor Safety Initiative Testing and Activities*, showed that used armor vests containing Zylon[®] may not provide the intended level of ballistic resistance. Of 103 Zylon[®]-containing used vests subjected to ballistic testing, 60 (58%) were penetrated by at least one round during a six-shot test series. Of those that passed penetration testing, 91% showed excessive “backface deformation,” an indicator of the potential blunt trauma experienced by an officer wearing the armor. Only four used armor vests tested met all performance criteria under NIJ’s standard for new body armor. The tests also showed that the age and appearance of used Zylon[®]-based vests are not reliable predictors of ballistic performance.

In response to these findings, under the direction of Attorney General Alberto R. Gonzales, DOJ is taking several actions, including the following:

- OJP’s Bureau of Justice Assistance is making \$23.6 million available through its fiscal year 2005 Bulletproof Vest Partnership (BVP) Program to equip law enforcement officers with new bullet-resistant armor. Since 1999, the BVP Program has helped law enforcement departments in 11,500 jurisdictions purchase some 450,000 vests. To better meet vest replacement needs this year, BJA is making an additional \$10 million available through a special BVP solicitation. Agencies may apply for funding until September 22.
- NIJ has issued a Body Armor Standard Advisory Notice to alert law enforcement to the potential risks associated with the use of Zylon[®] in body armor, and will adopt new interim requirements—effective September 26, 2005—for its body armor compliance testing program. Body armor models that contain Zylon[®] will not be compliant unless their manufacturers provide evidence satisfactory to NIJ that the models will maintain their ballistic performance over their declared warranty period.
- NIJ will continue its research to examine ballistic-resistant materials and improve understanding of degradation mechanisms. As new information becomes available, DOJ will issue advisories regarding materials used in the construction of body armor that appear to create a risk of death or serious injury as a result of degraded ballistic performance.

DOJ recommends that public safety agencies and officers purchase only bullet-resistant body armor models that comply with the new interim requirements. A list of body armor models that comply with the new requirements will be available at <http://www.justnet.org>.

In the meantime, DOJ encourages public safety officers to continue wearing their Zylon[®]-containing body armor until it is replaced, because even armor that may have degraded ballistic performance is better than no armor. An officer’s risk of fatality is 14 times greater when not wearing body armor. DOJ also encourages officers to follow body armor manufacturer “wear and care” instructions as, for example, machine washing of ballistic panels may hasten body armor degradation.

DOJ fully recognizes the tremendous risks that law enforcement officers face each day. The new testing program requirements and the funding available for new armor demonstrate its commitment to helping ensure that they have protective equipment that they can rely on as they strive to keep our communities safe.