



BALLISTIC RESISTANT Body Armor Basics

Body armor is the most important personal protective equipment available to law enforcement officers, but few officers who wear body armor understand its critical aspects. This brochure covers the basics every officer should know and provides resources for further information.

NIJ | National Institute
of Justice

STRENGTHEN SCIENCE. ADVANCE JUSTICE.



Following is the minimum information an officer should know about body armor:

- Body armor is not bulletproof; it is bullet resistant, and different armor models are designed to protect against different, specific types of ammunition. No body armor will stop every threat.
- The term body armor is usually associated with vests designed to provide ballistic protection to the torso's vital organs. Usually, a vest contains two armor panels held in place by a carrier.
- Each armor panel contains a ballistic panel (i.e., the protective material), sealed inside a ballistic panel cover (see below).



- One armor panel protects the front of the torso, and the other protects the rear. To protect the sides of the torso, the vest is worn with the front armor panel overlapping the rear armor panel.
- The armor panels can typically be removed from the carrier; however, the ballistic panel is not removable from the ballistic panel cover.

According to the FBI, 18 of the 48 officers killed by firearms in 2019 were not wearing body armor. Of the 30 officers killed who were wearing body armor, 29 died from firearms assaults and being struck in areas not protected by the vest. For instance, 13 were hit in the head or neck, 2 were hit in the arm or shoulder area, and 3 were hit below the vest. Officers who become engaged in a deadly assault situation are more likely to survive if they are wearing a vest. For more information, see the FBI's Law Enforcement Officers Killed and Assaulted (LEOKA) website at <https://www.fbi.gov/services/cjis/ucr/leoka>

You should wear only body armor that the National Institute of Justice (NIJ) Body Armor Compliance Testing Program has tested and found to comply with current NIJ Standard for Ballistic Resistant Armor requirements.

NIJ-compliant armor models, shown by protection level, may be found at <https://cjtec.org/compliance-testing-program/compliant-product-lists/>.

This webpage also contains a link to information explaining the content of the Compliant Product List.

For armor worn every day, you should select the level of armor that will protect you from assault with your own handgun, should it be taken from you during a struggle.

Ballistic-resistant body armor is neither designed nor tested to protect the wearer against edged or stabbing weapons.

Inspecting, caring for, and storing body armor in accordance with the manufacturer's instructions is vital to its continued performance.



RESOURCES

The fit guidance in this brochure comes from ASTM E3003, Standard Practice for Body Armor Wearer Measurement and Fitting of Armor. The standard contains information on proper measurement and fit, and a worksheet an officer can use to perform an assessment of his/her body armor fit. This document can be accessed at no charge to law enforcement and corrections officers from the webpage below:

<https://www.astm.org/NIJ/bodyArmorFit>

Additional and detailed information may be found at the following U.S. Department of Justice–sponsored website: <https://policearmor.org/>

Specific questions or concerns may be directed to askctp@nijctp.org.

DOES YOUR BODY ARMOR FIT

Well-fitting armor ...

- Does not restrict breathing.
- Allows the wearer to assume the preferred handgun shooting stance or to shoulder a long gun with minimal to no (1) bicep rubbing or discomfort, (2) tingling in arms or hands, or (3) interference with arms.
- Has no gaps between the torso and the armor at the armhole (i.e., armor flush against torso).
- Has continuous coverage along the front armhole edge in the chest/bust area. The figure at right shows a lack of continuous coverage in this area.
- Allows wearer to perform typical officer movements (e.g., squatting, sitting, kneeling, running) with minimal pinching at sides, pinching at the duty belt, or interference at neck or arms.
- Allows wearer to reach equipment located at the center back of the duty belt with minimal interference at the arms in back.
- Has front panel coverage (when seated) that vertically extends from the suprasternal notch at the base of the neck to the top of the duty belt. Note: This vertical coverage, when seated, appears differently when standing such that the front panel coverage vertically extends from the location of the second uniform shirt button to approximately two or three finger-widths from the top of the duty belt.



The figure at right shows a lack of vertical coverage on the torso front.

- Has back panel coverage that vertically extends from the most prominent vertebra at the neck to near the top of the duty belt.



The figure at right provides an example of lack of vertical coverage on the torso back.

Note: The bottom edge of the back panel should be level with the bottom edge of the front panel.



- Has side coverage that vertically extends from within 3 inches of the armpit to near the top of the duty belt. Note: The bottom edge on the sides should be level with the bottom edge of the front panel.
- Has at least a 2-inch overlap of the front and back panels on both sides.
- Has no discontinuities at the upper and lower edges of the overlap of the front and back panels.

The figure at right shows a lack of coverage on the sides and discontinuities.

