



Ballistic Vests: Fit, Coverage Care and Maintenance



Zero Officers Killed or Injured



Ballistic Vests: Fit, Coverage Care and Maintenance

- 2007 was one of the deadliest years for the U.S. law enforcement community since 1989
 - 28 %increase in officer fatalities
 - 33 %increase in those killed by gunfire
- Between 1980 and 2001 approximately 1,200 officers have been killed in the line of duty. More than **30 percent** could have been saved by body armor.
- Since 1987, over 3,000 individuals have been saved by their vest.

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FBI studies show that the risk of sustaining a fatal injury for police officers who do not wear body armor is 14 times greater than for officers who do.

VESTS SAVE LIVES

PROTECT YOURSELF
SO YOU CAN PROTECT HIM.

SAFE SHIELD
Division of State Association of Chiefs of Police

Kevlar

GORE-TEX



Ballistic Vests: Fit, Coverage Care and Maintenance

- **Vest Wear Policies**

- **Mandatory Policy Advocates:**

- National Law Enforcement Policy Center
- IACP Model Policy

- **Agency/Supervisor Responsibilities**

- Provide NIJ Standard 0101.06 compliant armor to officers
- Promote maximum body armor use
- Routine and regular inspections of armor

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Vest Fit and Coverage Issues

- Improper fit
 - Discomfort through reduced mobility
 - Reduced ballistic coverage

According to LEOKA data, from 1996 to 2007, 119 officers were killed as a result of ballistic penetration in areas not protected by their armor



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- **Breakdown of Vest Failures**
 - 34% (41 officers) armhole or shoulder area
 - 15% (18 officers) between the side vest panels
 - 16% (19 officers) above the vest
 - 13% (16 officers) below the vest

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Female Specific Vests

- Precise fit versus standard sizes
- Pleating
- Specific vest covers



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Benefits of Outer Vests



- Increased Coverage
- Increased Comfort
- Reduces Lower Back Strain





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Technological Developments

Spectra II Shield

- 20% greater ballistic performance than standard Spectra fiber
- High resistance to chemicals, water, and UV light
- 60% greater strength than aramid fibers

Kevlar XP

- 10% lighter in weight
- 15% reduction in backface deformation when using a .44 magnum bullet



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Care and Maintenance

- Officer Responsibilities
 - Routine inspections of body armor for signs of damage and cleanliness
 - Dirt and perspiration can erode ballistic panels
 - Never use dry cleaning solvents, harsh detergents, or bleach on body armor
 - Proper Storage
 - UV light and sunlight will damage ballistic capabilities



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Care and Maintenance

- Agency Responsibilities
 - Ensure armor is worn
 - Annual inspections of body armor for fit, cleanliness, and signs of damage, abuse and wear
 - Monitor technological advances in the body armor industry that may necessitate a change in armor
 - Assess weapons and ammunition currently in use and the suitability of approved armor to protect against those threats
 - Provide Training on effectiveness, technological advances, proper use and fit.



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- Procurement of Vests
 - Identify the appropriate level of threat for your agency:
 - Service weapon carried by officer
 - Confiscated weapons and ammunition
 - Review police reports to determine types of weapons being used in criminal cases
- Replacement of Vests

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IACP/DuPont Kevlar Survivors Club

- Encourage the increased wearing of personal body armor through documentation of the armor's effectiveness
- Recognize individuals who as a result of wearing personal body armor have survived life-threatening incidents
- Serve the law enforcement community by sharing valuable information relating to these incidents with fellow officers.

