

# Addressing Real-World STAB AND SLASH THREATS

## NIJ REVISING STAB-RESISTANT BODY ARMOR STANDARD

Corrections officers face danger and challenges to their safety on the job. Inmates are creative and inventive in fashioning improvised stab weapons from everyday objects or materials – even objects as simple as toothbrushes. They use these weapons to attack each other, and they also use them to attack officers. To help these officers obtain the protection they need against those threats, the National Institute of Justice (NIJ), the research and development arm of the U.S. Department of Justice, is updating *Stab Resistance of Personal Body Armor, NIJ Standard-0115.00*, which was adapted in 2000 from a United Kingdom standard that addressed the threat from commercially made knives. A draft for public comment is expected to be released later in 2016.

The end result will be a standard that will be more applicable to the environments in which many corrections officers work without burdening them with protection against non-applicable threats yet will maintain the commercial threat protection level for officers who work in uncontrolled environments.

The draft revision, *Stab Resistance of Personal Body Armor, NIJ Standard 0115.01*, addresses body armor panels intended to provide protection against the types of knife and spike threats that corrections officers face on a daily basis, and adds testing specific to female body armor models. A Special Technical Committee that includes corrections practitioners from multiple agencies worked diligently over an extended period to review the research and provide real world input into the developing standard.



NIJ Standard 0115.01 will provide two performance categories for stab/slash-resistant armor to reflect the following operating environments and anticipated threats:

- Commercially made weapons, typically found by corrections officers in facility intake and public areas, which are uncontrolled areas.
- Improvised or inmate-made weapons, typically encountered inside controlled access areas of jails, detention centers and prisons.

Also, both commercial and improvised tests will include knife and spike tests identified by the STC as representing prevalent threats, and female armor will be tested to ensure any stitching or forming of the bust cups continues to meet the same required level of protection afforded by unshaped armor.

The existing test blades in the standard will continue to be used as test weapons for commercial threats. Technical experts at NIJ's Justice Technology Center (JTIC) worked closely with academia to develop additional test weapons based on the types of improvised weapons confiscated or found within correctional facilities.

The standard also covers conditioning (tumbling the armors for many days) prior to testing to ensure they continue to work as intended after being subjected to sustained mechanical damage, along with simple tests for label legibility and durability. The ability to continue



to read the label as the armor is worn and used over time is significant for a number of reasons, including needing to know pertinent information such as model number (in the event of a recall) and the protection level.

JTIC, which is part of the National Law Enforcement and Corrections Technology Center (NLECTC) System, supports NIJ's standards development and implementation and administers its Compliance Testing Program, under which equipment is evaluated and subject to a series of tests described in NIJ standards to determine if it meets minimum performance requirements. Body armor models that comply with the standard are added to the Compliant Product List posted on the NLECTC website, [www.justnet.org](http://www.justnet.org). For more information on the draft standard, contact JTIC Materials Engineer Dan Longhurst at [dlonghurst@justnet.org](mailto:dlonghurst@justnet.org)