The IAB identifies standards development priorities for the responder community each year, and a survey is conducted to vet and prioritize the priorities within the IAB. The Standards Coordination SubGroup then works with ANSI’s Homeland Defense and Security Standards Coordination Collaborative and the DHS Office of Standards to engage federal agencies, standards developing organizations, researchers, stakeholder organizations, and practitioners in addressing those priorities.

The IAB standards development priorities for 2016 are listed below. To learn more about the IAB and the Standards Development Priority List, please visit www.interagencyboard.org.

1. **PERFORMANCE STANDARD FOR NON-PNEUMATIC LIMB TOURNIQUETS**
   - There is currently no specification or test method for non-pneumatic tourniquets used by responders, and a standard is needed to give confidence or a comparable baseline for claimed performance by manufacturers. There are known incidents of tourniquets failing when used and reports of counterfeit tourniquets being sold. The standard should include performance requirements and test methods for assessing performance such as complete occlusion of arterial blood flow in thigh, capable of easy release and re-application, application time $\leq 60$ seconds, simplicity and ease of application in the tactical environment, minimal familiarization required for correct application, locking device/technique to ensure no slipping or loosening of the tourniquet, and durability at extreme temperatures.

2. **STANDARD PRACTICES, TEST METHODS, AND PROCEDURES FOR MONITORING EFFECTIVENESS OF PROTECTIVE CLOTHING DOFFING FOR AVOIDANCE OF CONTAMINATION TRANSFER**
   - Contamination transfer often occurs when doffing protective clothing because responders are not taught proper procedures and precautions for avoiding transfer of contaminants following use and exposure. According to a 2015 report, fewer than one in six healthcare workers followed the correct recommendations for removal of personal protective equipment (PPE) after patient care, likely contaminating themselves and increasing the risk of transmission to others. A standard is needed to provide the general requirements for monitoring how contamination transfer occurs during doffing. These requirements should provide for the use of specific fluorescent tracer solutions, their manner of application, selection of test subjects, safety provisions for human subjects use, manner of doffing, and procedures for viewing and documenting fluorescent on individuals following exposure.

3. **PERFORMANCE STANDARD FOR BOMB SUITS, ADDRESSING BLAST OVERPRESSURE PROTECTION**
   - The scope of this requirement is to develop performance requirements and test methods to be added to the current version of NIJ Standard-0117, Public Safety Bomb Suit Standard, to address blast overpressure protection. The effects of blast overpressure on the human body need to be taken into account to address external and internal impact/injury to the head, neck, thorax, abdomen, and ears. Development of performance requirements and test methods will require research and testing.
4. PERFORMANCE STANDARD FOR LESS LETHAL CHEMICAL AGENT DEVICES
A performance standard, including test methods, is needed to address the performance of chemical agent devices and their delivery systems. Several types of chemical agent devices are currently in use, including OC (oleoresin capiscum) spray (i.e., pepper spray), CS (o-phenylphenol) spray (i.e., tear gas), powdery, and smoke. The following issues could be addressed by having a performance standard: chemical concentrations vary greatly between products of the same model; manufacturer claims on material safety data sheets are not consistent and the sheets do not list all contents; there have been instances of chemical agents or their carriers being ignited by use of a conducted energy device; the effective distance range from canister to subject is inconsistent and not predictable; there are inconsistencies with low temperature use; and high temperatures can cause canisters to burst.

5. STANDARD TEST METHOD FOR LESS LETHAL CONDUCTED ENERGY WEAPONS
Conducted energy weapons (CEWs) (e.g., TASERs) are used by more than 16,000 law enforcement agencies as a less lethal force option. CEWs are designed to introduce electrical charge into a human body for the purpose of creating pain and incapacitation. Although they are commonly used, CEWs are not tested to any standards and have been found in field use to be very inconsistent in their electrical output. The biggest problem is “cold” weapons that do not have high enough output to cause pain much less incapacitation. Situations in which CEWs are deployed and have low output typically result in the use of lethal force. A standard test method is needed to allow for consistent, independent testing of CEWs prior to purchase and deployment in the field.

6. PERFORMANCE STANDARD FOR LESS LETHAL DISTRACTION DEVICES
A performance standard is needed for noise flash diversionary devices, also known as distraction devices, flash-bangs, or stun grenades, used by law enforcement and corrections. The following issues could be addressed by having a performance standard: officers have been injured, burned, or killed due to distraction devices exploding in the user’s hand; devices do not remain stationary after deployment but can roll or propel to unintended locations; devices produce so much smoke that visibility becomes limited; the sound output of the devices is neither consistent nor specified by the manufacturer; brightness and duration of light produced by the devices is inconsistent; and some devices burn so hot that they caused unintended structure fires.

7. PERFORMANCE STANDARD FOR LESS LETHAL IMPACT (I.E., KINETIC ENERGY) DEVICES USING A LAUNCHING SYSTEM TO FIRE PROJECTILES
Performance requirements and test methods need to be developed to address the performance of less-lethal impact devices, such as polyurethane projectiles, plastic projectiles (e.g., Pepperball, FN), wooden batons, foam batons, and bean bags, fired from a launching system. The standard should address the following: intended use; appropriate launching systems; projectile type, materials, and number in cartridge; accuracy and velocity of projectile; impact energy in foot-pounds; effective distance range; resistance to moisture from rain and high humidity; potential hazards; and black powder/smokeless.

8. STANDARD TEST METHOD FOR EXPLOSIVE CONTAINMENT VESSELS
Civilian and military bomb technicians use explosive containment vessels to transport explosives and improvised explosive devices. A standard, including performance requirements and test methods, is needed to evaluate: (1) the capability of total containment vessels (TCVs) to contain an explosive blast and/or chemical/biological agents inside the vessel and (2) the venting/scrubbing properties of the TCVs and related machinery. It is not known whether publications exist regarding testing and performance of containment vessels. Unofficial testing has been conducted by the U.S. Marine Corps Explosive Ordnance Disposal program using vessels manufactured by NABCO Inc. and Mistral Security Inc.; however, testing has been reliant upon the manufacturer for operational use and specifications. Development of performance requirements and test methods will require research and testing.

9. STANDARD GUIDANCE FOR ILLICIT SUBSTANCE DETECTION
Law enforcement officers (LEOs) are in need of guidance for dealing with suspected illicit substances encountered in the field. The issue has gained importance as officers are faced with handling “liquid meth” (i.e., methamphetamine in solution), which has become a more common procedure for attempts to smuggle illicit drugs across U.S. borders. A notable gap exists between finding a substance, testing it, and identifying it as methamphetamine in solution. Once the substance is identified, the handling and PPE requirements become easy to address. Before the substance is identified, officers face the very difficult situation of having a “solution suspected of containing illicit substances.”

Prior to developing guidance, an assessment of current national guidelines, methods, and best practices for LEO approach to evaluation of unknown compounds (solids, powders, liquids, vapors) for illicit substances needs to be done. The assessment should ask whether current LEO policies meet or reflect the current best practices for safety, efficiency, effectiveness, evidentiary chain of custody, intent to conceal, and processes to document prevention of contamination along chain of custody.