AOAC Stakeholder Panel on Agent Detection Assays (SPADA)

AOAC Stakeholder Panel on Agent Detection Assays (SPADA) was established by AOAC under a contract with the Department of Homeland Security. Since 2007, SPADA has established standards for PCR based technology for Bacillus anthracis, Francisella tularensis, Yersinia pestis, Burkholderia mallei and Burkholderia pseudomallei. SPADA has also developed standards for immunological based assays, also known as hand-held assays, for Bacillus anthracis and ricin. The standards published in the Journal of AOAC INTERNATIONAL are the result of leveraging stakeholders to reach consensus on method performance requirements for tools and technologies needed by the biological threat agent, public health, and public safety communities.

With a goal of developing an enduring national capability, DHS is currently supporting a pilot validation for a PCR-based technology and one hand-held assay. These methods are being validated using the harmonize processes of the AOAC Performance Tested® and Official Methods® Programs. MRIGlobal has developed reference materials and is the laboratory capacity for the validation studies.
Performance Standards for Threat Detection Equipment

SPADA, an enduring national capability established to leverage the threat community to develop national voluntary consensus standards for third-party evaluation of threat detection tools.

Standards guide procurement decisions of end-users, provide first responders with independently validated threat detection tools for incident management, can provide state and local government with evaluation criteria for regulation, can provide minimum acceptance criteria to federal agencies for acquisition decisions.

 Participating Organizational Stakeholders

<table>
<thead>
<tr>
<th>Public Safety</th>
<th>Military</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health</td>
<td>Professional Organizations</td>
</tr>
<tr>
<td>Method Developers</td>
<td>Federal Law Enforcement</td>
</tr>
<tr>
<td>Reference Materials Providers</td>
<td>State &amp; Local Law</td>
</tr>
<tr>
<td>End Users</td>
<td>National Laboratories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Institutions</th>
<th>Contract Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal/State Regulatory</td>
<td>Federal/State Coordinating</td>
</tr>
<tr>
<td>Industry - General</td>
<td></td>
</tr>
</tbody>
</table>

**Accomplishments**

- 13 Stakeholder Meetings
- 10 Specialized Working Groups
- 9 Consensus Based Standards
- 1 Town Hall Meeting

**Publications & Completed Standards**

*Development of Standard Method Performance Requirements for Biological Threat Agent Detection Methods.*

**AOAC SMPR 2010.001:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Francisella tularensis* in Aerosol Collection Filters and/or Liquids (2011) Vol. 94, No. 4, pp. 1338-1341(4).

**AOAC SMPR 2010.002:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Yersinia pestis* in Aerosol Collection Filters and/or Liquids (2011) Vol. 94, No. 4, pp. 1342-1346(5).

**AOAC SMPR 2010.003:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Bacillus anthracis* in Aerosol Collection Filters and/or Liquids (2011) Vol. 94, No. 4, pp. 1347-1351(5).

**AOAC SMPR 2010.004:** Standard Method Performance Requirements for Immunological-Based Handheld Assays (HHAs) for Detection of *Bacillus anthracis* Spores in Visible Powders (2011) Vol. 94, No. 4, pp. 1352-1355(4).

**AOAC SMPR 2010.005:** Standard Method Performance Requirements for Immunological-Based Handheld Assays (HHAs) for Ricin in Visible Powders (2011) Vol. 94, No. 4, pp. 1356-1358(3).

**AOAC SMPR 2011.xxx:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Burkholderia pseudomallei* in Aerosol Collection Filters and/or Liquids – PUBLICATION FORTHCOMING

**AOAC SMPR 2011.xxx:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Burkholderia mallei* in Aerosol Collection Filters and/or Liquids – PUBLICATION FORTHCOMING

**AOAC SMPR 2011.xxx:** Standard Method Performance Requirements for Polymerase Chain Reaction (PCR) Methods for Detection of *Bacillus anthracis* in Visible Powders – PUBLICATION FORTHCOMING

**AOAC INTERNATIONAL Methods Committee Guidelines for Validation of Biological Threat Agent Methods and/or Procedures** (2011) Vol. 94, No. 4, pp. 1359-1381(23).


**Individual Hand Held Assay for Ricin Toxin** [AOAC Performance TestedSM Certification No. 121201]. Brunelle, Sharon L; Hadfield, Ted; Ryan, Valerie – PUBLICATION FORTHCOMING


Copyright © 2013 AOAC INTERNATIONAL. All Rights Reserved.