A Survey of Tier 1 BSAT Personnel Suitability and Occupational Health Programs

Presented by:
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ASU Statistics

Total Students: 83,952
- 67,550 undergraduate students
- 16,402 graduate students

Paid Employees: 21,525
- 9,343 student workers
- 6,699 staff
- 5,483 faculty

3,200 background checks / year
1,600 finger print checks / year
Survey Design

• The purpose of the survey was to assess the current state of occupational health and personnel suitability programs at institutions with Tier 1 BSAT

• 11 question survey sent to 1,561 people

• 300 respondents to survey
# Guidelines for Occupational Health Programs

*Source: Table modified from Appendix II of the *Occupational Health Program Guidance Document for Working with Tier 1 Select Agents and Toxins*, 2013.

<table>
<thead>
<tr>
<th>Agents</th>
<th>Pre-Placement Examinations</th>
<th>Immunization</th>
<th>Respiratory Protection Program</th>
<th>Emergency Medical Evaluation</th>
<th>Post-Exposure Management</th>
<th>Isolation Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bacillus anthracis</em></td>
<td>X</td>
<td>X*</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Botulinum neurotoxin</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Botulinum neurotoxin</td>
<td></td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>producing species of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Clostridium</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Burkholderia mallei</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Burkholderia pseudomallei</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Ebola virus</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Foot and Mouth Disease virus</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Francisella tularensis</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Marburg virus</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Rinderpest virus</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Variola major virus</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Variola minor virus</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>Yersinia pestis</em></td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Based upon risk.*
Pre-Access

Occupational Health
Pre-Access - Vaccinations / Titers

Responses (n=77)

None Required
Hepatitis B
Influenza
Tetanus
Diphtheria
MMR
Pertussis
Vaccinia
Yellow Fever
Hepatitis A
Typhoid Fever
Other Vaccinations
Pre-Access - Medical Exams
Responses (n=79)

Health Questionnaire 69
Respirator Medical Clearance 61
Respirator Fit-Test 49
Physical Exam 46
Allergy Questionnaire 33
Spirometry Evaluation 24
Vision Exam 21
Audiometric Evaluation 16
None Required 3
Other Requirements 14
Pre-Access - Blood / Lab Tests

Responses (n=79)

- None Required: 37
- Tuberculosis Screening: 27
- Serum Banking: 26
- Comprehensive Metabolic...: 15
- Complete Blood Count: 15
- HIV Screening: 11
- Liver Function Screening: 6
- Hemochromatosis Screening: 5
- Other Elements: 15
# Pre-Access - Other Responses

<table>
<thead>
<tr>
<th>Vaccination / Titer</th>
<th>Depends on agent being studied; <em>Bacillus anthracis</em> vaccination; Japanese Encephalitis Virus vaccination; <em>Mycobacterium tuberculosis</em> vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Exam Components</td>
<td>Depends on agent being studied; <em>Brucella</em> titer; chest x-ray; electrocardiogram; latex screening; serum banking; Tuberculosis test</td>
</tr>
<tr>
<td>Blood / Lab Components</td>
<td>Hepatitis B screening; Hepatitis C screening; Radioallergosorbent Test (RAST)</td>
</tr>
</tbody>
</table>
Ongoing Access
Occupational Health
Ongoing Access - Medical

Responses (n=79)

- Health Questionnaire: 62
- Respirator Medical Clearance: 45
- Respirator Fit-Test: 42
- Physical Exam: 31
- Allergy Questionnaire: 29
- Vision Exam: 17
- Spirometry Evaluation: 14
- Audiometric Evaluation: 11
- None Required: 9
- Other Screening: 14
Ongoing Access - Blood / Lab Tests

Responses (n=78)

- None Required: 46
- Tuberculosis Screening: 25
- Complete Blood Count: 14
- Comprehensive Metabolic Profile: 9
- HIV Screening: 8
- Liver Function Screening: 7
- Other Elements: 11
# Ongoing Access - Other Responses

## Medical Exam Components

Individuals go to Health Services if symptoms develop that are consistent with the organism being studied; mental health screening; medical record screening; pregnancy surveillance program; self-reporting conditions that may predispose them to infection; Tuberculosis surveillance; vaccinations

## Blood / Lab Components

Annual physical; dependent upon agent being studied; dependent upon medical evaluation; Hepatitis B screening; Hepatitis C screening; Radioallergosorbent Test (RAST)
## Pre-Access Suitability Assessments

- Criminal history
- Education history
- Home address history
- Interviews and assessments of personal behavior
- Professional license/certification history
- References, including contact Information
- Resume or curriculum vitae (including publications, affiliations)
- Visa status (if applicable)
- Work history

## Optional

- Drug testing
- Evaluation by employee assistance program counselors
- Occupational health evaluation
- Personnel records review (e.g., credit checks, driving records)
Suitability Assessments Guidance

Source: Table modified from recommendations in the Guidance for Suitability Assessments, 2013.

**Ongoing Suitability Assessments**

- Annual evaluations (occupational health, independent evaluation)
- Annual technical, biosafety, and security performance evaluations
- History of compliance with the Select Agent Rules
- History of grievance/complaint records
- History of retention of subordinate staff
- Information gathered upon exit interviews with staff
- Life changing events (personal and professional)
- Peer reporting of conditions and behaviors of concern
- Periodic review of access requirements
- Periodic review of criminal records
- Record of previous or current collaborations
- Review of criminal records and visa status
- Review of performance evaluations
- Self reporting of conditions and behaviors of concern
Personnel Suitability
## Pre-Access - Suitability

Responses (n=84)

<table>
<thead>
<tr>
<th>Check Type</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal Conviction History</td>
<td>77</td>
</tr>
<tr>
<td>Employment Verification</td>
<td>77</td>
</tr>
<tr>
<td>FD-961 Form</td>
<td>70</td>
</tr>
<tr>
<td>Education Check</td>
<td>67</td>
</tr>
<tr>
<td>Fingerprinting Check</td>
<td>59</td>
</tr>
<tr>
<td>Reference / Peer Check</td>
<td>57</td>
</tr>
<tr>
<td>Respirator Clearance / Fit Test</td>
<td>49</td>
</tr>
<tr>
<td>Financial / Credit Check</td>
<td>34</td>
</tr>
<tr>
<td>Professional License Check</td>
<td>30</td>
</tr>
<tr>
<td>Personality Assessment</td>
<td>27</td>
</tr>
<tr>
<td>Drug Screen</td>
<td>27</td>
</tr>
<tr>
<td>Psychological Testing</td>
<td>16</td>
</tr>
<tr>
<td>Integrity Testing</td>
<td>12</td>
</tr>
<tr>
<td>Polygraph Exam</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
</tr>
</tbody>
</table>

Total Responses: 84
Ongoing Access - Suitability

Responses (n=81)

- Performance Evaluation: 66
- Supervisor Assessment Form: 52
- FD-961 Form: 50
- Respirator Clearance / Fit Test: 47
- Peer Assessment Form: 46
- Criminal Conviction History: 41
- Drug Screen: 22
- Fingerprinting: 18
- Financial / Credit Check: 17
- Other: 11
“For Cause” - Suitability

Responses (n=59)

- Fitness for Duty Testing: 38
- Criminal Conviction History: 30
- Threat Assessment: 29
- Drug Screen: 27
- Stress Assessment: 22
- Financial / Credit Check: 21
- Psychological Testing: 15
- Respirator Clearance / Fit Test: 13
- Polygraph Exam: 2
- Other: 14
## Suitability - Other Responses

### Pre-Access

Behavioral-based interview; home address history; interview with Certifying Official; interview with Responsible Official; occupational health pre-placement exam; secret clearance checks; threat assessment; visa status

### Ongoing Access

Health risk assessment; mental status check; self-reporting DUI and drug convictions

### For Cause

Behavioral screening; interviews; motor vehicle checks
Ensuring Compliance
<table>
<thead>
<tr>
<th>Description</th>
<th>2014 Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>County criminal felony and Misdemeanor with Social Trace (includes all counties within 7 years, based on social security # trace)</td>
<td>$90</td>
</tr>
<tr>
<td>Education verification</td>
<td></td>
</tr>
<tr>
<td>Employment verification (past 7 years work history, up to two employers)</td>
<td></td>
</tr>
<tr>
<td>Professional references (2)</td>
<td></td>
</tr>
<tr>
<td>Sex offender registry check</td>
<td></td>
</tr>
</tbody>
</table>
Hiring Official

- Professional references selected from previous work experiences in the past 7 years or from the age of 18, whichever represents a shorter period of time.
- Technical references, if applicable.
- Peer references to speak to the person’s reliability, trustworthiness, honesty, judgment, emotional or mental stability, potential conflicting allegiances and potential or propensity for coercion.
Tier 1 BSAT Hiring

- Text included in the job description; and
- Text included as part of the interview or pre-hire process.
- OR
- Staff will be hired, trained and mentored, and then evaluated over a period of time to determine if they are qualified to work with select agents or toxins.
The candidate selected will work with and/or have access to biological select agents and toxins (BSATs). These agents are strictly controlled and are subject to federal and institutional regulations, policies, and procedures. Pursuant to federal regulations, ASU shall conduct pre-employment screenings, which will include verification of work history, academic credentials, references, licenses, and certifications.

Employment is contingent upon passing: FBI security risk assessment; criminal and misdemeanor background check; and occupational health assessment. Occupational health assessment will include, but is not limited to: physical exam; medical screening; respirator fit testing; required vaccinations (Tetanus, MMR, ACAM 2000, and any other based upon research requirements); and baseline tuberculosis testing.
The FBI Security Risk Assessment is only affected by indictments or convictions punishable by imprisonment for a term exceeding one year.

Individuals may have been arrested for or convicted of lesser crimes. For example, these may show a pattern or practice of engaging in wrongful or inappropriate conduct or exhibiting poor judgment.

Criminal records should be obtained to verify information.
Any employee that does not pass the assessment will be immediately denied access to Tier 1 BSAT. An individual may appeal a denial, limitation, or revocation of access.

Even if an appeal is granted, the final decision is at the discretion of the RO.
Whole Person

• When assessing criminal history, all events will be put into the context of the “whole person.”

• Consideration is given to:
  • The nature of the event and risk to personnel, laboratory or animal facility.
  • The circumstances at the time of an event.
  • The time that has passed since the event of concern.
  • The total number of events causing concern.
Continued Access

For each person with access, or the ability to gain access, to Tier 1 BSAT, the Certifying Official will conduct a criminal background check (including misdemeanors) and a sex offender register check every three years.

ASU Health Services will conduct an annual occupational health assessment for each person with access to, or the ability to gain access to, Tier 1 BSAT.
Dear Peer,

According to federal regulations, [the institution] is required to have an Ongoing Personnel Suitability Assessment Program covering all personnel with access, or the ability to gain access, to Tier 1 Biological Select Agents and Toxins (BSAT). The completion of the enclosed Personnel Suitability Assessment Form is an important component of this Program.

The Center for Disease Control and Prevention has determined that essential elements of an Ongoing Personnel Suitability Assessment Program are self and peer assessments. Thus, each employee who has or could gain access to a Tier 1 BSAT (“Tier 1 Employee”) will be assessed by his or her peers at least once a year. For purposes of this Program, a “Peer” is defined, in a broad sense, as someone who observes, interacts, and/or works with the Tier 1 Employee on a regular or frequent basis. A Peer will assess a Tier 1 Employee by completing a Personnel Suitability Assessment Form...
Questions?

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  – David.Gillum@asu.edu