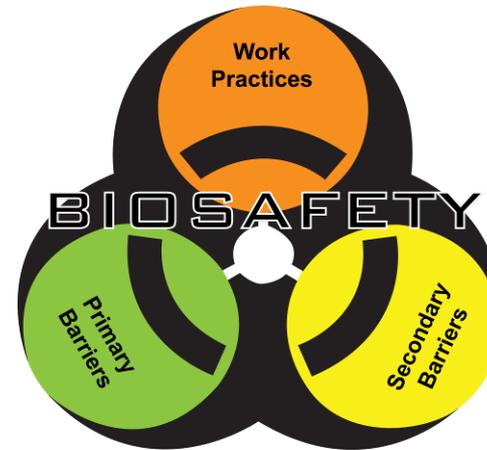
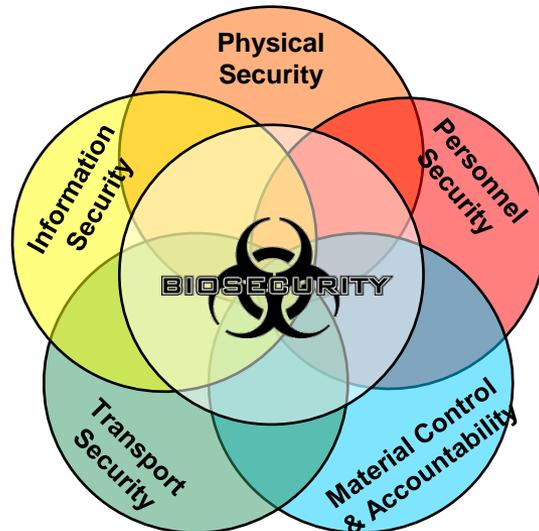




Personnel Management



Controlling Laboratory Biorisks Training Course

International Biological Threat Reduction Program

Global Security Programs

Sandia National Laboratories

Albuquerque, NM USA



SAND No. 2008-0480P

Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.



Learning Objectives

- **Discuss how to increase the likelihood that only appropriate individuals have access to the laboratory**
- **Identify and discuss the various vetting methods employed in the personnel management process, especially those in different countries and cultures.**
- **Emphasize the importance of medical surveillance and training in the overall goal of risk mitigation.**
- **Emphasize that the methods can be implemented in a graded manner, depending on the risk of the position.**



Question Who works in your lab?

- **Are they reliable?**
- **Are they trustworthy?**
- **Are they capable of working safely?**
- **And why are these questions important?**





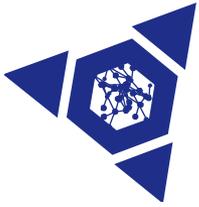
Personnel Management

- **Knowing who has access to your laboratory is very important for controlling Biological Risks**

**Biosafety
Risks**

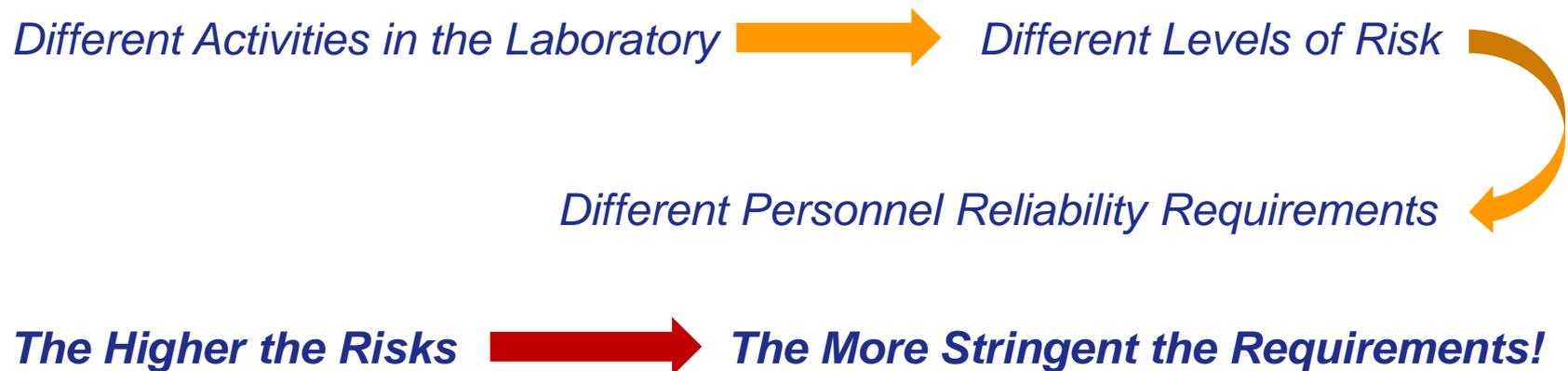
**Biosecurity
Risks**

- **A Personnel Management program works to address these concerns.**



Personnel Management Measures Depend on the Risk

- **Not all positions** present the same risk
- **Not all situations** present the same risk





Components of a Personnel Management Program

- **Personnel Reliability**
- **Occupational Health**
 - Fit testing
 - Assessment of pre-existing conditions
 - Vaccines
- **Training**
 - Lab specific - PPE, GLP, BSC, MC&A, ...
 - Facility procedure



Personnel Reliability

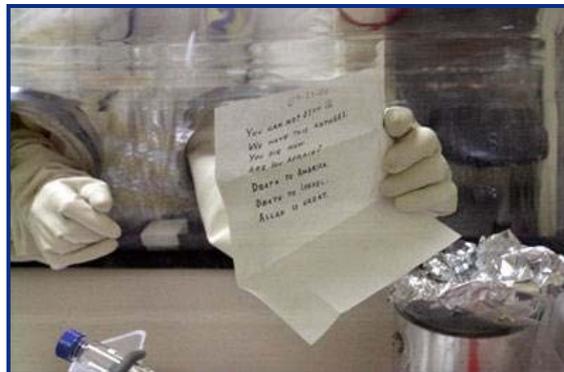
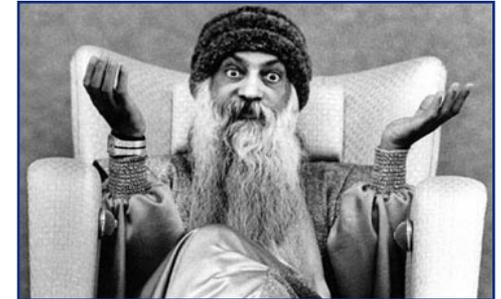
- The objective of a **Personnel Reliability** program is to help judge a person's integrity.





Biosecurity Illustrative Cases

- Ft. Detrick attempt
- Eric Kranz
- Dr. Mitsuru Suzuki
- Diane Thompson
- Rajneesh Cult
- Aum Shinrikyo Cult
- Amerithrax perpetrator

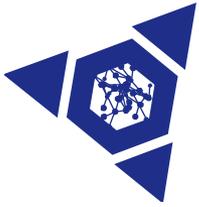




Approaches for Vetting Individuals

- **Interviews**
- **Skill testing**
- **Personality testing**
- **Drug testing**
- **Public records**





Background Checks

- **National Police Criminal History Record**
 - E.g. In US, FBI Identification Record
- **Commercial Investigators**
- **Use of Publically Accessible Information**
 - Educational Records
 - Profession Credentials
 - Military Records
 - Court Records
 - Criminal Checks
 - Financial Checks





Vetting Process Discussion

- **What are some of the advantages and disadvantages of each type of the vetting process?**
 - Public records?
 - Interviews?
 - Personality testing?
 - Skill testing?
 - Drug testing?



Example of National Personnel Assessment

The US Select Agent Program

- **Objective**

- To determine if an individual is a **Restricted Person** as defined by the USA PATRIOT ACT

- **Mechanism**

- Responsibility has been assigned to the FBI
- Electronic Database and fingerprint check



- **Who**

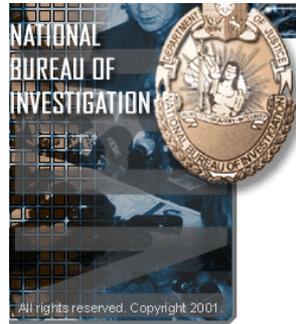
- Individuals who have been identified as requiring access to select biological agents and toxins
- Responsible Officials (RO)
- Alternate Responsible Officials (ARO)
- Individuals who own or controls the entity





Examples: National Personnel Assessment Outside the US

- **The Philippines – National Bureau of Investigation (NBI) Clearance**



- **The UK – Criminal Record Bureau (CRB) Disclosure**





Personnel Reliability Discussion

- **What are the most commonly used methods of personnel reliability screening, if any, in your country? at your institution?**
- **What are the major limitations to personnel reliability screening in your country? at your institution?**
 - Lack of available data? Institutional interest? Individual researcher interest?
- **Have there ever been any personnel reliability incidents in your institution?**
- **What are some of the ways you can improve personnel reliability at your institution?**



Discussion Additional Points

- **Personnel Reliability programs do not protect against an Outsider Threat – only the Insider Threat! (Physical Security protects against the Outsider).**
- **However, Physical Security and Personnel Reliability should go hand-in-hand.**
- **Granting access to the laboratory and its materials is a privilege and should be treated as such.**
- **All individuals working in a laboratory should understand the hazards of the workplace and how to mitigate them!**
- **Generally, it is important for the employer to ask all of the tough questions early on, because it is more difficult to do so later after the individual is hired**
- **The degree of screening should correspond to the level of risk determined by the risk assessment!**



Occupational Health

- **The objectives of a Occupational Health program are to:**
 - Set and enforce medical standards for safe work in the laboratory (**Pre-work Requirements**)
 - Determine and react to potential exposures in the laboratory. (**Exposure Surveillance**)
- **Depending on your laboratory requirements you may or may not need a formal Occupational Health program.**



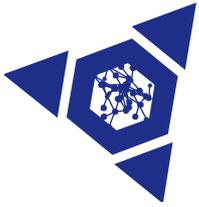
Occupational Health - Pre-Work Requirements

- **Pre-existing Medical Conditions that increase risk**
 - Allergies
 - Pregnancy
 - Immune Suppression, etc.
- **Physical Requirements**
 - Strength to Handle Animal Cages
 - Corrected Vision, etc.
- **Fit-Testing of Personnel Protective Equipment (PPE)**
 - N95 Masks, etc.
- **Proper Immunizations**



Occupational Health - Exposure Surveillance

- **System to monitor personnel health**
 - Symptoms
 - Periods on sick leave
 - Also fatigue that may affect safety and performance
- **Is baseline serum and periodic or post-incident testing needed?**
- **Ensure reporting of any potential exposure and incident**



Training

- **The goal of training within Personnel Management is to ensure people understand:**
 - The **risks** they are faced with.
 - The risk-mitigation **measures** at their facility
 - **Incident and Accident Response**
 - **Donning and Doffing PPE**
 - **Entering the Lab**
 - **Inventories**
 - **Identifying Who Should Not be in the Lab, etc.**



In-Processing

- **Program should document the steps necessary prior to granting an individual authorized access, e.g.**
 - Background investigation
 - Safety and security training
 - Job –specific briefing
 - Immunizations
- **Where do new hires work until vetting process and trainings are complete?**
 - Can take months to years depending on process

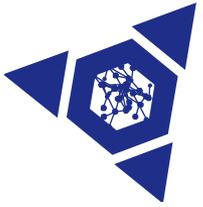




Out-Processing

- **Change access**
 - Do combination locks need to be changed?
- **Retrieve property, including (for example)**
 - Badges, keys
 - Laboratory notebooks
 - Pathogenic materials
 - Laptops, PDAs, cell phones, pagers
 - Library materials
- **Deactivate computer and electronic access accounts**
- **If appropriate, notification of Responsible Official to change Select Agent program registration**





Badges

- **Badges should be issued to those individuals authorized to be in restricted areas**
- **Badge information should include**
 - Individual's name
 - Individual's photograph
 - Expiration date
 - Indication of areas where individual has authorized access
- **Badge return**
 - Upon employee termination
 - Daily or at the conclusion of a limited term for visitors
- **Report lost or stolen badges**





Visitor Controls

- **Types**
 - Personal Visitors
 - **Family members**
 - Casual Visitors
 - **Tours, seminars**
 - **Equipment repair technicians**
 - Working Visitors
 - **Visiting researchers**
 - **Facility maintenance personnel**
- **Controls**
 - All visitors should have a host at the facility
 - Visitors should be escorted in restricted areas
 - Institution needs to establish policy on amount advance notice required for each type of visitor





Personnel Management **Conclusion**

**Biosafety
Risks**

**Biosecurity
Risks**

- **The aim is to ensure people you give access to your laboratory are:**
 - Responsible and trustworthy.
 - Able to understand the importance of safety and security.
 - Able to follow proper safety and security procedures in the laboratory.
 - Willing to report accidents and incidents.
 - Are not at increased risk of infection.
 - Properly trained to your laboratory requirements.