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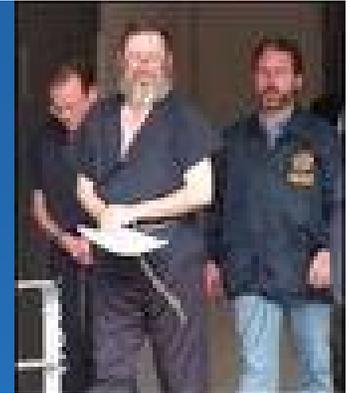
BIORISK MANAGEMENT & PERSONNEL RELIABILITY

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BIOSECURITY

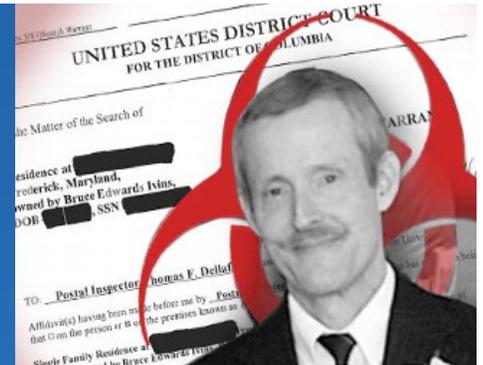
- MEASURES TO PREVENT THEFT, DIVERSION OF HIGH-RISK PATHOGENS
- US SELECT AGENT RULES: 1996 + 2001/2
- COMPONENTS:
 - PHYSICAL BARRIERS
 - FACILITY CERTIFICATION
 - PERSONNEL RELIABILITY CHECKS
 - ACCOUNTABILITY OF SELECT HUMAN, ANIMAL, PLANT PATHOGENS:
 - * TRANSFERS
 - * ACCESS
 - OVERSIGHT & PROTECTION OF SENSITIVE INFORMATION, TECHNIQUES
 - CRIMINAL PENALTIES





CURRENT RULES v. THE INSIDER THREAT

- **DOD = PURPORTEDLY STRONGEST RULES, BUT....**
- **SELECT AGENT REGULATIONS:**
 - CHECKED FOR EACH AGENT
 - ACCESS DENIED IF:
 - ILLEGAL ALIEN
 - DISHONORABLE DISCHARGE FROM MILITARY
 - HISTORY OF PROBLEMS:
 - MENTAL HEALTH
 - CRIMINAL
 - SUBSTANCE ABUSE
- **EFFECTIVE AGAINST THE IVINS SCENARIO?**



OPTIONS TO ADDRESS THE INSIDER THREAT



- **CODES OF ETHICS**
- **LABORATORY PRACTICE**
 - BUDDY RULE
- **INCREASED SECURITY**
 - VIDEO SURVEILLANCE
 - RANDOM EXIT CHECKS
 - PERIODIC POLYGRAPHS
- **PERSONNEL RELIABILITY PROGRAMS**



Use the buddy system when working late in the lab



MODEL I: “LITE” BUT BROAD



- GERMAN MODEL
- SECURITY SCREENING TO VERIFY:
 - * IDENTITY * REFERENCES * QUALIFICATIONS
 - * EMPLOYMENT + CRIMINAL HISTORY
- REVETTED EVERY 5 YEARS
- WIDE COVERAGE:
 - FEDERAL & PRIVATE SECTOR
 - WORKING WITH & TRANSPORTING PATHOGENS & HIGHLY TOXIC SUBSTANCES



“LITE” BUT BROAD MODEL



• HEALTH CHECKS IN MILITARY LABS:

– INITIAL:

- DOCTOR EVALUATES PHYSICAL, MENTAL FITNESS + BLOOD TEST

– SUBSEQUENT:

- ANNUAL PHYSICAL
- SELF-REPORT + TREATMENT
- IF SUSPICIONS, RANDOM TESTING



• PUBLIC HEALTH LABS = ALL BIOSAFETY LEVELS:

- INITIAL PHYSICAL EXAM
- NO SUBSEQUENT SCREENING, UNLESS REQUESTED



MODEL II: DEEP BUT NARROW

- NUCLEAR PERSONNEL SURETY MODEL
- BACKGROUND CHECK:
 - TRUSTWORTHINESS
 - SUSCEPTIBILITY TO COERCION
 - CONDITIONS THAT MAY EFFECT JUDGMENT/RELIABILITY
 - CRIMINAL + CREDIT RECORDS



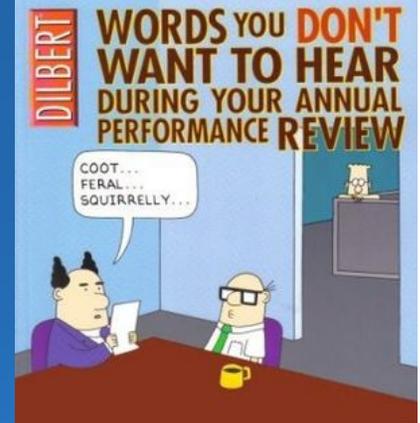
DEEP BUT NARROW MODEL

- INITIAL HEALTH CHECK:
 - PHYSICAL FITNESS
 - 2 HOUR PSYCHOLOGICAL EXAM
 - SUBSTANCE ABUSE SCREENING:
 - URINE
 - BREATHALYZER
- SUBSEQUENT CHECKS:
 - PSYCHOLOGICAL EXAM = EVERY 3 YEARS
 - SUBSTANCE ABUSE SCREENING:
 - YEARLY
 - RANDOM



DEEP BUT NARROW MODEL

- SYSTEM OF LAYERED ACCOUNTABILITY:
 - SUPERVISOR = INITIAL + ANNUAL REVIEWS
 - ALL = OBSERVE COWORKERS TO DETECT UNUSUAL BEHAVIOR
 - INDIVIDUALS = SELF-REPORT
 - MENTAL, CRIMINAL, PHYSICAL PROBLEMS
- CONSEQUENCES:
 - BENCHED
 - FIRED



CONCLUDING OBSERVATIONS

- **CONSEQUENCES OF LOSING PUBLIC TRUST**
- **WORKING WITH HIGH-RISK PATHOGENS:**
 - **RIGHTS VERSUS RESPONSIBILITIES**
- **BROAD BUT GRADUATED?**
 - **EFFECTIVE**
 - **TRANSPARENT**
 - **FIX THE REPORTING => CONSEQUENCES QUANDARY**

