

Mistakes Happen: Accidents and Security Breaches at Biocontainment Facilities

last updated on 5/7/2007

Category	Date	Location	Accident Type	Agent	Description	Reference
<i>Environmental Releases</i>	4/1/02	USAMRIID (Fort Detrick, MD)	Accidental Release, Exposure of Personnel	Anthrax (Biosafety Levels 2, 3 and 4)	Researcher tested positive for exposure to anthrax spores, which were also released into adjacent hallway and office.	David Dishneau, "Fort Detrick worker tests positive for anthrax exposure," <i>Associated Press</i> , 4/19/2002
	4/2/02	USAMRIID (Fort Detrick, MD)	Accidental Release, Exposure of Personnel	Anthrax (Biosafety Levels 2, 3 and 4)	One worker tests positive for anthrax exposure after second leak at USAMRIID.	Rick Weiss & David Snyder, "Anthrax Leaks a 2nd Time at Army Lab," <i>Washington Post</i> , 4/24/2002, B1.
	3/1/03	Federal Express (Columbus, OH)	Environmental Release	West Nile Virus (Biosafety Levels 2 and 3)	A package containing the West Nile virus exploded in Federal Express building, exposing workers to possible infection & causing offices to be evacuated.	"Package Carrying West Nile Explodes at Columbus Airport," <i>Associated Press</i> , 3/20/2003
	6/1/03	USAMRIID (Fort Detrick, MD)	Environmental Release	Brucellosis (Biosafety Levels 2 and 3), Anthrax (Biosafety Levels 2,3, and 4), Ebola (Biosafety Level 4) and others.	U.S. Army unearthed 113 bacteria-containing vials during an excavation to eliminate toxic chemicals & hazardous waste (including live anthrax and ebola) buried between 1955 and 1970.	Lois Ember, "Fort Detrick Cleans Up," <i>Chemical & Engineering News</i> , 6/2/2003, p. 12
<i>Intentional Releases</i>	11/28/03	(suspected) U.S. Army laboratories or Brattelle Memorial Institute (Columbus, OH)	Intentional Release	Anthrax (Biosafety Levels 2, 3 and 4)	Anthrax spores used in 2001 mail attacks, killing five people, contained properties that could only be manufactured in one of a small number of sophisticated government or corporate laboratories.	Gary Matsumoto, "Anthrax Powder: State of the Art?" <i>Science</i> , Vol. 302, November 28, 2003, p.1492-97
	9/11/01	USAMRIID (Fort Detrick, MD)	Intentional Release	Anthrax (Biosafety Levels 2, 3 and 4)	Dry anthrax spores derived from USAMRIID were used in the Sep 2001 mail attacks that resulted in 5 deaths.	Timothy D. Read, et al. "Comparative Genomic Sequencing for Discovery of Novel Polymorphisms in <i>Bacillus Anthracis</i> ," <i>Science</i> , 6/14/2002, Vol. 296, pp. 2028-33
<i>Containment and Security Failures</i>	12/2/03	Plum Island Animal Disease Laboratory, USDA (Plum Island, NY)	Containment / Security Failure	None Reported	3 Hour power failure undermined containment systems, leading workers to seal windows & doors with duct tape, air compressors failed.	Marc Santora, "Power Fails for Three Hours at Plum Island Infectious Disease Lab," <i>New York Times</i> , December 20, 2002, p. B1
	6/18/97	National Institute of Infectious Diseases (NIID), Toyama, Japan	Facility deemed a risk to public health and safety	Various, at a Biosafety Level 3 facility	A 1997 inspection of the Biosafety Level 3 facilities at NIID conducted by a biosafety consultant to the World Health Organization concluded that there was a "strong possibility that NIID, through its location and activities, could be an unacceptable risk to public health and safety".	Dr. Christopher Collins and Dr. David Kennedy, "Report of an Inspection Carried Out at the National Institute of Infectious Diseases Toyama, 1-23-1, Shinjuku-ku, Toykyo 162, on 18 June, 1997" http://homepage2.nifty.com/sisibata/inspection.pdf
	5/7/02	U.S. Department of Agriculture (various sites)	Containment / Security Failure	None Reported	FBI investigation finds many USDA laboratories that handle select agents are vulnerable to theft, permit unauthorized visitors, and cannot completely account for their pathogen holdings.	"Report Finds Easy Lab Access to Deadly Pathogens," <i>Reuters</i> , May 7, 2002

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	12/03-1/04	Infectious Disease Research Institute	Containment Failure / Infection of Personnel	Tuberculosis (Biosafety Level 3)	Three researchers were infected with tuberculosis after the seal of a test chamber began leaking. The researchers were not wearing respirators.	Washington Department of Labor and Industries, "Inspection Information" (Sunshine Project, April 18, 2005)
<i>Missing Samples</i>	8/29/05	Public Health Research Institute at the University of Medicine and Dentistry of New Jersey	Missing Samples	Bubonic Plague (Biosafety Level 3)	Three mice infected with plague were found to be missing from separate cages. Media was not notified for two weeks and FBI could not explain the disappearance	Josh Margolin and Ted Sherman, "Lab loses track of three mice that had plague," <i>Star-Ledger</i> , 9/15/05
	Early 1990s	USAMRIID (Fort Detrick, MD)	Missing Samples	Anthrax, Ebola, and others not listed.	Over two dozen dangerous agents including anthrax and Ebola go missing in the early 1990s at USAMRIID. Agents subject to removal without authorization.	Rick Weiss and Joby Warrick, "Army Lost Track of Anthrax Bacteria," <i>Washington Post</i> , 1/21/2002, p. A1
<i>Exposures and Infections of Personnel</i>	2/9/06	Texas A&M University	Infection of Personnel	Brucellosis (Biosafety Levels 2 and 3)	Laboratory employee infected while cleaning aerosol test chamber. Texas A&M did not file required CDC report until April 10, 2007.	Freedom of Information Request filed by The Sunshine Project, http://www.sunshine-project.org/publications/pr/pr120407.html
	5/15/04-9/15/04	Boston University Medical Center, Clinical Microbiology and Molecular Diagnostics Laboratory (Boston, MA)	Infection of Personnel	Tularemia (Biosafety Level 2 and 3)	Three scientists infected with tularemia over five-month period, while dozens more exposed. Incidents not discovered or reported for over six months.	Stephen Smith, "BU Delayed Reporting Potentially Lethal Exposure," <i>Boston Globe</i> , January 20, 2005.
	6/11/04	Children's Hospital and Research Center (Oakland, CA)	Exposure of Personnel	Anthrax (Biosafety Levels 2, 3 and 4)	Southern Research Institute inadvertently sends live (rather than dead) anthrax samples to researchers in Oakland, resulting in exposure of seven scientists. Problem detected after 49 of 50 mice quickly died after inoculation with anthrax samples. No human infections reported.	John Dudley Miller, "US Lab is Sent Live Anthrax," <i>The Scientist</i> , June 11, 2004.
	5/5/04	State Research Center of Virology and Biotechnology (Russia)	Infection of Personnel	Ebola virus (Biosafety level 4)	Scientist researching Ebola vaccine at a US-funded facility is infected with Ebola and dies. Infection not reported for several weeks, preventing prompt and effective treatment.	Judith Miller, "Russian Scientist Dies in Ebola Accident at Former Weapons Lab," <i>New York Times</i> , May 25, 2004.
	3/28/04	National Institute of Virology (Beijing, China)	Environmental Release, Infection of Personnel	SARS (Biosafety Levels 3 and 4)	Over two month period, two graduate students working BL 3 laboratory acquired SARS, leading to transmission to seven other people outside the lab, one death, and quarantining of over 200 people in two provinces.	David Brown, "SARS Cases in Asia Show Labs' Risks," <i>Washington Post</i> , May 24, 2004.
	2/19/04	USAMRIID (Fort Detrick, MD)	Exposure of Personnel	Ebola virus (Biosafety level 4)	Civilian Army researcher possibly exposed to Ebola virus after accidentally pricking herself with a needle that contained the virus while injecting mice with the virus as part of a research effort.	http://www.cnn.com/2004/HEALTH/02/19/ebola.exposure/index.html , Barbara Starr "Researcher Isolated After Possible Ebola Exposure," <i>CNN</i> , 2/19/2004

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	12/5/03	U.S. Department of Agriculture Lab, Beltsville, MD	Infection of Personnel	E.Coli (Biosafety Level 2)	A researcher was working with E.Coli outside of a hood and failed to sufficiently sanitize the area afterward, thereby infecting a colleague.	John Dudley Miller, "Researcher alleges CDC cover-up," <i>The Scientist</i> , 6/15/05
	12/1/03	Institute of Preventive Medicine, National Defense University (Taiwan)	Infection of Personnel	SARS (Biosafety Levels 3 and 4)	Military researcher in a Biosafety Level 4 lab was infected while studying the SARS virus, leading to the quarantining of 34 people with whom she came in contact. No additional cases of SARS were reported.	"SARS Alert Likely to be Eased in New Year," <i>China Post</i> , 12/20/2003; Center for Disease Control, Taiwan, "A Report on the Laboratory-Acquired SARS Case in Taiwan," 1/7/2004.
	9/5/03	Environmental Health Institute (Singapore)	Infection of Personnel	SARS (Biosafety Levels 3 and 4)	Doctoral student handling SARS-contaminated West Nile Virus sample in BL 3 facility is infected with SARS and hospitalized. Laboratory was found to not meet BL 3 safety standards.	David Brown, "SARS Cases in Asia Show Labs' Risks," <i>Washington Post</i> , May 24, 2004.
	4/5/02	University of Texas Health Science Center (Houston, TX)	Infection of Personnel	Anthrax (Biosafety Levels 2, 3 and 4)	Laboratory worker with primary responsibility of handling anthrax specimens was diagnosed with cutaneous anthrax.	"Suspected Cutaneous Anthrax in a Laboratory Worker--Texas, 2002," <i>Morbidity and Mortality Weekly Report</i> , 4/5/2002, p. 279.
	12/20/02	Unknown	Infection of Personnel	West Nile Virus (Biosafety Levels 2 and 3)	Microbiologist in U.S. laboratory contracted WNV after cutting finger with a scalpel used to perform a necropsy on lab animal.	G. Campbell, et al."Laboratory-Acquired West Nile Virus Infections--United States, 2002," <i>Morbidity and Mortality Weekly Report</i> , 12/20/2002, p. 1133.
	8/1/02	Unknown	Infection of Personnel	West Nile Virus (Biosafety Levels 2 and 3)	Microbiologist in U.S. laboratory contracts WNV after puncturing skin with a contaminated needle.	G. Campbell, et al."Laboratory-Acquired West Nile Virus Infections--United States, 2002," <i>Morbidity and Mortality Weekly Report</i> , 12/20/2002, p. 1133.
	May-02	U.S. Department of Agriculture Lab, Wyndmoor, Pa.	Infection of Personnel	E.Coli. (Biosafety Level 2)	Researchers working with an infectious strain of E.Coli did not use proper protection as they thought they were working with a harmless variety.	John Dudley Miller, "Beltsville E. coli infection was not first," <i>The Scientist</i> , 6/30/05
	6/1/98	Yerkes Primate Center (Atlanta, GA)	Infection of Personnel	Simian Herpesvirus (Biosafety Levels 3 and 4)	Research Assistant at the Yerkes Primate Center, (Part of NIH Primate Research Program) died 6 weeks after being exposed in lab.	"Fatal Cercopithecine Herpesvirus 1(B Virus) infection following a mucocutaneous exposure," <i>Morbidity and Mortality Weekly Report</i> , 47:1073-6, 1083, 1998.
	6/1/98	Yerkes Primate Center (Atlanta, GA)	Exposure of Personnel	Simian Herpesvirus (Biosafety Levels 3 and 4)	A second researcher was exposed to possible infection three weeks after first case (see above) at Yerkes Primate Center.	"Second researcher may have been exposed to deadly herpes B virus," <i>Star Tribune</i> , Minneapolis, MN, 1/1/1998, p.23A
	8/1/94	Yale University (New Haven, CT)	Infection of Personnel	Sabia Virus (currently Biosafety Level 4, though not designated as such in 1994)	Yale Virologist contracted sabia virus and subsequently exposed 75 co-workers in the laboratory.	M. Barry, M. Russi, L. Armstrong, et al. "Brief report: treatment of a laboratory acquired Sabia virus infection." <i>New England Journal of Medicine</i> , 1995; 333:294-6
	1985-87	Washington, DC	Infection of Personnel	HIV (Biosafety Level 2 and 3)	Two researchers who contracted virus in D.C. laboratories became infected after using defective gloves. Exposed through cuts on hands.	"New AIDS Infection in a Lab," <i>Chicago Tribune</i> , 10/10/1987, p. 5

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	6/1/87	Unknown	Infection of Personnel	HIV (Biosafety Level 2 and 3)	A Researcher became infected with HIV after exposure through "unapparent whole in gloves" (speculation), no definite cause was identified.	Chase, Marilyn. "Worker Gets AIDS Virus from Lab Job," <i>Wall Street Journal</i> , 1/4/1998, p.1