

The 5 previous pages and 2 pages after this page are denied in full under FOIA exemptions (B)(1) and (B)(3):50 USC 3024(i) & (B)(3):10 USC 424

(U) Biosafety Requirements for Handling BSL-4 Pathogens: Diagnostic Versus Research Laboratories

(U) Researching extremely dangerous pathogens in a lower-level containment or a diagnostic BSL-4 facility poses a significant biosafety risk and goes against international biosafety regulations. WHO standards specify that research BSL-3 and BSL-4 laboratories require more biosafety equipment and engineering controls than diagnostic facilities.³⁷ Performing research in high-containment laboratories usually involves complex methodologies and manipulation of high-risk agents at very high concentrations, increasing the risk of pathogen exposures. Diagnostic BSL-3 and BSL-3+ facilities that detect deadly diseases, such as HIV or Ebola, mitigate biosafety risks associated with inadequate equipment by handling pathogens at low concentrations or inactivating test samples before performing disease detection methods. BSL-3+ laboratories sometimes identify pathogens usually handled in a BSL-4 and operate with more biosafety measures than a typical BSL-3. However, BSL-3+ facilities do not have suitable infrastructure like a BSL-4 to safely research extremely dangerous pathogens.³⁸

~~(S//NF)~~ (b)(1), Sec. 1.4(c), Sec. 1.4(e)

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(b)(1); (b)(3):50 USC 3024(i); Sec. 1.4(c); Sec. 1.4(e)

(U) Outlook, Implications, and Opportunities

(b)(3):50 USC 3024(i)

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(b)(1); (b)(3):50 USC 3024(i); Sec. 1.4(c); Sec. 1.4(e); Sec. 1.4(g)

~~(S//NF)~~ (b)(1), Sec. 1.4(c), Sec. 1.4(e)

¹⁹ (U) Internet, World Health Organization website | 12 Dec 2018 | (U) Biosafety Guidelines for Diagnostic and Research laboratories Working with HIV; Overall document classification is UNCLASSIFIED.

²⁰ (S//NF) [Redacted]
²¹ (S//NF) [Redacted]
²² (S//NF) [Redacted]
²³ (S//NF) [Redacted]
²⁴ (S//NF) [Redacted]
²⁵ (S//NF) [Redacted]
²⁶ (U//NF) [Redacted]
²⁷ (S//NF) [Redacted]
²⁸ (U) (b)(1); (b)(3):10 USC 424; (b)(3):50 USC 3024(i), Sec. 1.4(c)
²⁹ (S//NF) [Redacted]
³⁰ (S//NF) [Redacted]
³¹ (S//NF) [Redacted]
³² (U) [Redacted]
³³ [Redacted]
³⁴ (S//NF) [Redacted]
³⁵ (U) [Redacted]
³⁶ (U) [Redacted]

³⁷ (U) Internet, World Health Organization website | 12 Dec 2018 | (U) Biosafety Guidelines for Diagnostic and Research laboratories Working with HIV; Overall document classification is UNCLASSIFIED.

³⁸ (U) Internet, World Health Organization website | 12 Dec 2018 | (U) Biosafety Guidelines for Diagnostic and Research laboratories Working with HIV; Overall document classification is UNCLASSIFIED.

³⁹ (U) [Redacted] (b)(3):10 USC 424; (b)(3):50 USC 3024(i)
⁴⁰ (U) [Redacted]