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Sommario/riassunto	"BioWatch is an air monitoring system deployed in jurisdictions around the country with the goal of detecting the presence of certain high risk pathogenic microorganisms. It relies on a network of federal and nonfederal collaborative relationships to be successful, and is one part

of a larger array of disease surveillance, intelligence-gathering, and biomonitoring activities in support of public safety and health. The assays used in the BioWatch system to detect the presence of pathogens in collected samples rely on the technique of polymerase chain reaction (PCR) to sensitively and specifically amplify target nucleic acid sequences. BioWatch PCR Assays evaluates and provides guidance on appropriate standards for the validation and verification of PCR tests and assays in order to ensure that adequate performance data are available to public health and other key decision makers with a sufficient confidence level to facilitate the public health response to a BioWatch Actionable Response. This report discusses principles of performance standards, reviews information from several existing guidance documents and standards that might be applicable to BioWatch, and discusses assay testing efforts that have occurred or are ongoing. BioWatch PCR Assays provides recommendations on general principles and approaches for a performance standard and validation framework to meet BioWatch's mission. The report also considers how developments in technology, particularly in multiplex PCR and next-generation sequencing, can contribute to the ability of the BioWatch program to meet current and future challenges. This report has been determined to contain information exempt from disclosure under 5 U.S.C. 552(b). Section 15 of the Federal Advisory Committee Act provides that the National Academies shall make its final report available to the public unless the National Academies determines that the report would disclose matters described in one or more of the exemption provisions under the Freedom of Information Act (FOIA). In such case, the National Academies "shall make public an abbreviated version of the report that does not disclose those matters." This unrestricted, abbreviated version of the report represents, in so far as possible, the committee's findings, recommendations, and other substantive material without disclosing materials described in 5 U.S.C. 552(b)"--Publisher's description.

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