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Note generali	"Committee on Methodological Improvements to the Department of Homeland Security's Biological Agent Risk Analysis, Board on Mathematical Science and their Applications Division on Engineering and Physical Sciences, Board on Life Sciences Division on Earth and Life Studies, National Research Council of the National Academies".
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Nota di contenuto	""Acknowledgments""; ""Contents""; ""Summary""; ""1 Introduction""; ""2 The Critical Contribution of Risk Analysis to Risk Management and Reduction of Bioterrorism Risk""; ""3 Description and Analysis of the Department of Homeland Security's Biological Threat Risk Assessment of 2006""; ""4 Department of Homeland Security Decision Requirements for Risk Management""; ""5 Risk Assessment for Unknown and Engineered Biothreat Agents""; ""6 Improving Bioterrorism Consequence Assessment"" ""7 Improving the Department of Homeland Security's Biological Threat Risk Assessment and Adding Risk Management"" ""Appendix A: Lexicon""; ""Appendix B: Mathematical Characterization of the Biological Threat Risk Assessment Event Tree and Risk Assessment""; ""Appendix C: Computational Example Illustrating the Replacement of a Joint Distribution of Arc Probabilities with Marginal Expected Values of Individual Arc Probabilities""; ""Appendix D: Bioterrorism Risk Analysis with Decision Trees""

""Appendix E: Optimizing Department of Homeland Security Defense Investments: Applying Defender-Attacker (-Defender) Optimization to Terror Risk Assessment and Mitigation"" ""Appendix F: Combining Game Theory and Risk Analysis in Counterterrorism: A Smallpox Example""; ""Appendix G: On the Quantification of Uncertainty and Enhancing Probabilistic Risk Analysis""; ""Appendix H: Game Theory and Interdependencies""; ""Appendix I: Review of BTRA Modeling""; ""Appendix J: Reprinted Interim Report""; ""Appendix K: Meeting Agendas""; ""Appendix L: Biographies of Committee Members"" ""Appendix M: Acronyms""

Sommario/riassunto

"The mission of Department of Homeland Security Bioterrorism Risk Assessment: A Call for Change, the new book from the National Research Council, is to independently and scientifically review the methodology that led to the 2006 Department of Homeland Security report, Bioterrorism Risk Assessment (BTRA) and provide a foundation for future updates. This book identifies a number of fundamental concerns with the BTRA of 2006, ranging from mathematical and statistical mistakes that have corrupted results, to unnecessarily complicated probability models and models with fidelity far exceeding existing data, to more basic questions about how terrorist behavior should be modeled. Rather than merely criticizing what was done in the BTRA of 2006, this new NRC book consults outside experts and collects a number of proposed alternatives that could improve DHS's ability to assess potential terrorist behavior as a key element of risk-informed decision making, and it explains these alternatives in the specific context of the BTRA and the bioterrorism threat."--Publisher's website
