

# Terrorist Attacks by Chemical or Biological Means: An Examination of Hospitals' Preparation for Handling Victims of Chemical or Biological Weapons of Mass Destruction

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## Abstract

Any weapon capable of causing such widespread death and destruction that its mere presence in the hands of hostile forces poses a grave threat is considered a WMD. The bombing of the World Trade Center in 1993, the bombing of the Murrah Federal Building in Oklahoma City in 1995, the use of planes as guided missiles directed into the Pentagon and New York's Twin Towers in 2001, and the tragic incidents involving twenty-three people who were infected and five who died as a result of contact with anthrax-laced mail in the fall of 2001 have well established that the United States of America can be attacked by both domestic and international terrorists without warning or pro Hospitals have been diligently working to ensure that, in the event of a subsequent terrorist attack, they would be "ready" to provide appropriate medical care to victims. However, a recent nationwide survey conducted by the United States General Accounting Office (GAO) found that our nation's hospitals are still ill-equipped to handle large-scale casualties caused by chemical or biological WMD. As a result, there is a clear need for information about the current preparedness of hospitals in order to lay the groundwork for methodical planning and more general discussions about relative costs, probable effectiveness, the impact on the environment, and societal priorities as a whole. As a result, the purpose of this study was to investigate how well-prepared hospitals in the state of Mississippi are currently to care for victims of terrorist attacks that involve chemical or biological WMD. For this study, all acute care hospitals in the state were chosen. For the purpose of data collection and analysis, both quantitative and qualitative approaches were utilized. Six speculations were tried. Hospitals' functional preparedness plans, preparedness-specific education and training, decontamination facilities, surge capacity, pharmaceutical supplies, and laboratory diagnostic capabilities were examined through a questionnaire survey. According to the findings, the majority of hospitals in the state of Mississippi have documented preparedness plans, provided that specific preparedness education and training is provided. These plans also include plans for pharmaceuticals and supplies for treating victims in the event of a disaster involving chemical or biological WMD, as well as facilities for decontamination.

**Keywords:** Hospital; Terrorism; Preparedness; Weapons of Mass Destruction

## Introduction

The United States (U.S.) is not immune to attacks by domestic and international terrorists without warning or provocation, as demonstrated by the bombing of the World Trade Center in 1993 and the Murrah Federal Building in Oklahoma City in 1995, the use of planes as guided missiles directed into the World Trade Center and Pentagon in 2001, and the tragic incidents following this same year involving twenty-three people who were infected and five who died as a result of contact with anthrax-laced mail. Hospitals have been diligently working to ensure that they would be prepared to provide victims with adequate care in the event of another terrorist attack in light of these incidents and the on-going threat of additional attacks [1,2].

However, a recent nationwide hospital preparedness survey conducted by the United States General Accounting Office (GAO) found that our nation's hospitals are still ill-equipped to handle large-scale casualties caused by any kind of weapons of mass destruction. "The U.S. and its allies are still the targets of terrorist attacks and our lives and the lives of our friends allied nations continue to be threatened," President Bush stated in the State of the Union Address in 2005. Additionally, the President stated that while the United States has led the way in disarming terrorists and reducing their capabilities, there are still a number of "terrorist cells." Attorney General John Ashcroft said in a June 2004 news conference titled New Terrorist Threats that terrorists are planning another attack on U.S. soil, which could happen at any time. Ashcroft and Government Department of Examination (FBI) Chief Robert Mueller uncovered that al Qaeda accepts it is just

about 90% complete with plans for one more huge scope assault on the U.S. Ashcroft and Mueller additionally accept that the new rail line bombarding in Madrid has fortified the determination of some psychological oppressor gatherings, persuading them to go after the U.S. once more. As a result of the arrest of a possible terrorist in Ohio who planned to bomb a shopping mall, both agree that, despite the fact that a number of planned major events frequently occur in the United States that could be attractive targets for terrorists, the next terrorist attack may not necessarily occur during a major event. Instead, they suggest that for their subsequent attack, terrorists may target so-called soft targets like supermarkets, apartment buildings, or malls [3-5].

Porter Gross, Director of the Central Intelligence Agency (CIA), claims that al Qaeda-affiliated terrorist groups pose the greatest threat to the United States. In a recent statement to the Senate Intelligence Committee, Gross argued that, despite progress against al Qaeda, terrorist groups are determined to find ways to circumvent the United

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States' security enhancements and launch additional attacks on American soil. Global Security Newswire writer Mike Nartker recently reported that a CIA think Tank report prepared by the National Intelligence Council indicates that a terrorist group is likely to conduct an attack in the United States using biological weapons by the year 2020 [6]. The report called attention to that over the course of the following

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4. Gabrilovich DI, Chen HL, Girgis KR, Carbone DP, Kavanaugh D et al. (1996) Production of vascular endothelial growth factor by human tumors inhibits the functional maturation of dendritic cells. *Nat Med* 2: 1096-1103.
  5. Fang HY, Hughes R, Murdoch C, Randall SJ, Hongxia ZI et al. (2009) Hypoxia-inducible factors 1 and 2 are important transcriptional effectors in primary macrophages experiencing hypoxia. *Blood* 114: 844-859.
  6. Marjolein MG, Kes Jan Van den Bossche, Arjan W (2021) Oncometabolites lactate and succinate drive pro-angiogenic macrophage response in tumour's 1874: 188427.
  7. Larionov I, Liu T, Riabov V, Cherdyntseva N, Kzhyshkowska J (2022) PO-265 Cisplatin induces pro-inflammatory program and modulates pro-angiogenic potential of human tumor-associated macrophages 3: A331.
  8. Pilar Chinchilla, Liqing Xiao, Marcelo G. Kazanietz, Natalia A (2010) Riobo Hedgehog proteins activate pro-angiogenic responses in endothelial cells through non-canonical signaling pathways 9: 570-579.
  9. Stephen L Rego, Rachel S (2022) Helms Didier Dreau Breast tumor cell TACE-shed MCSF promotes pro-angiogenic macrophages through NF- B signaling 17: 573-585.
  10. Phospholipid Zonation Products Activate the 5Lipoxygenase Pathway in Macrophages.