

## Chapter 64

# Bioterrorism, Bio Crimes and Politics: A Case of Chaos and Complexity

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### ABSTRACT

*Right from the onset, man woke up to a strenuous and hostile surrounding. He had to swiftly learn that just like the planet upon which his life hinged possessed enormous attractive endowments, so was it rich in hostility. Given its delicate nature humanity therefore had to adapt particular ways of living for survival and inevitably has since then evolved over thousands of years into the so called Homo-sapiens or modern man. Undoubtedly as modern man's continued trajectory to transformation gave birth to philosophy and science along with the icing that came with it, man finds himself entangled in a more complex and chaotic web with threats far greater than his imagination. One such a threat is biological weaponry a product of science that has potential to be used as a tool to orchestrate murder, terror and other sophisticated crimes. Owing to the vast amount of resources required to assemble these biological weapons it's fervently rare to find an ordinary individual utilizing them, instead governments and of recent some heavily financed terrorist groups can harness the catastrophic potential of these weapons to destroy both local and foreign adversaries. In a world stirred up with tensions, the powerful ones are amassing weapons of every caliber to rise above perceived enemies, yet rocket speed advancing biotechnology is making the manufacturing of biological weapons easier and consequently proliferation of biological war material is becoming inevitable. Therefore whereas the world health organization and United Nation are grappling with keeping biological science generated terror or crimes under check, it is high time the world started viewing them in light of the actual threat they pose today as tools exploitable in the notion of politicking.*

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## INTRODUCTION

The use of biological weapons by man may have first revealed itself in the form of poisoning one's enemies or making them eat deadly foods during early years of civilization. Yet when man became more embraced with the scientific know how he ventured into isolating disease cause entities (pathogens) and then exposing them to his adversaries who could die upon contracting deadly diseases. With time this became an art of war and many scientists were recruited into militaries. The competitive rivalry in possession of the most advanced biological weaponry reached alarming levels at the beginning of the 20<sup>th</sup> century and the once simple lay man's tool successfully translated to a tool of supremacy. By so doing it had earned itself a comfortable place in the spheres of politics as a tool of influence. The onset of the 21<sup>st</sup> century saw an upsurge in sophisticated bioterrorism which not only disgorge over the USA but also spread across the globe hence becoming as a priority item on the agendas of international concern of our times. To this end, countries have beefed up their defense mechanisms against proliferation of the biological weapons and funding packages for anti-bioterrorism and counter defensive measures have indeed sky rocketed in the past decade in USA (Marshall, 1999) as well as other nations. Yet numerous complexities some of which bear political origin continue to engulf the necessary fight against heinous evils related to bioweapons. This article therefore seeks to elaborate the complex nature surrounding biological weapons and their intrinsic relationship with politics.

## Biological Warfare and Bioterrorism

Biological warfare connotes a type of warfare which involves the deliberate use of biological agents on plants, animals and people so as to cause harm or destroy life. The broader use of biological material by a person, organization and other entities with ideological or political reasons through open or secret methods against third parties designated as adversaries constitutes to what is termed as bioterrorism. Biological weapons possess severe implications for life and Lederberg asserts that these types of mass destruction weapons must be formally condemned as an irresponsible threat against the whole human community (Lederberg, 1999).

These biological agents may be viruses, bacteria, toxins or other harmful creatures capable of inflicting a state of illness or death to their targets. Important to note however is the fact that some of these agents exist in nature with little or mild harm and can therefore be only translated into lethal tools through efforts of weaponization (Cole & Gurr, 2002). Yet with examples like the release of plague-carrying fleas by Japan in World War II (Christopher et al., 1997), history has clearly portrayed the immense value of a proper delivery mechanism if these weapons are to achieve their aim. For the purpose of comprehending the subject to its entirety, am obliged to think that an understanding of the scientific characterization of these biological agents will certainly benefit the reader.

Three main categories have been largely accepted throughout the scientific community; category A consisting of the most lethal agents such as Smallpox virus (*variola major*), Anthrax (*Bacillus anthracis*), Botulism toxic agent *Clostridium botulinum*, Plague (*Yersinia pestis*), Tularemia (*Francisella tularensis*), Ebola, Marburg and Junin (Argentine hemorrhagic fever) viruses. All the above are highly dangerous biological agents with almost zero remedy and can only be handled in specialized highest safety compliant laboratories. Category B consists of second degree hazardous agents the most common of which include *Brucella* species, *Salmonella* species, *Shigella dysenteriae*, *E.coli* O157:H7, *Vibrio cholerae*, *Cryptosporidium parvum*, *Staphylococcal B-entero* toxin, *Clostridium perfringens*, Glanders

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