

Israel and Biological Weapons

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The fragile security situation Israel has experienced since its founding has determined its policies regarding the pursuit of unconventional weapons. Information regarding its biological quest, known to have begun as early as 1948, is dealt with extreme secrecy and sensitivity. Analysts however note that Tel Aviv considered biological weapons to be a less effective deterrent than chemical or nuclear weapons. Israel on its part has maintained that it will not be the first to introduce weapons of mass destruction (WMD) into the Middle East. It has also supported the establishment of a WMD-free zone in the region.

Introduction

The unique circumstances leading up to its founding and the fragile security situation it has experienced since then have determined Israel's policies regarding the pursuit of unconventional weapons. The development of nuclear weapons capability is a prime example of Israel's felt imperative to secure national survival in the face of what it perceived to be a hostile regional security environment. While research (and speculation) into aspects of its nuclear quest are well known, the development of its chemical and biological weapons (CBW) capabilities have not elicited similar kind of scrutiny.

The Biological Quest: Secrecy and Sensitivities

Israel's biological quest is reported to have begun as early as in 1948 when a unit dedicated to biological warfare was set up within the HEMED, the science department of the Israel Defence Forces (IDF), called the HEMED BEIT. The unit later moved to its permanent location at Ness Ziona, outside Tel Aviv, where the Israel Institute of Biological Research (IIBR) was established in 1952. The IIBR has been at the forefront of conducting research into various aspects of biological (and chemical) warfare. It is pointed out that IIBR's capabilities and expertise are "consistent with a full array of activities associated with a sophisticated BW (biological weapons) program."¹ Work at IIBR included research into toxins, agents, pathogens, chemical incapacitants, among other aspects. The fact that research on these issue areas has both civilian and military applications points to the difficulties involved in distilling the specifics of an offensive BW programme. This made it more difficult due to the massive secrecy surrounding the functioning of institutions like the IIBR. Analysts have pointed out that its operating budgets have also not been revealed and scientists working on its staff are reportedly sworn to strict secrecy regarding the nature of their work. Strict censorship which still envelops information regarding a former top scientist

at IIBR, Marcus Klingberg, who was convicted of being a spy for the Soviet Union and sentenced to an 18-year prison term in 1983, exemplify the extreme sensitivity with which the Jewish state deals with these aspects.²

It is worth noting however that primary research into dangerous biological pathogens is not prohibited under Article I of the 1972 Biological and Toxin Weapons Convention (BTWC) – which Israel has not signed or ratified. The 1925 Geneva Protocol (which Israel acceded to in 1969), also does not prohibit the developing, stockpiling, and producing of biological weapons, though it does prohibit their use in warfare.³

WMD in the Middle East: The Arab Factor

Israel has for long maintained that it will not be the first to introduce weapons of mass destruction into the Middle East. It has also supported the establishment of a WMD-free zone in the Middle East.⁴ The verifiable renunciation of the WMD programmes of the Arab states has been an important caveat that Israel has held on to, along with the establishment of ‘comprehensive peace’ with the Palestinians.⁵

The Arab states on their part embarked on building chemical and biological arsenals (as well as ballistic missiles) as a counter to the Israeli nuclear endeavor. The extensive chemical and biological weapons programmes of Egypt in the 1960s and Iraq in the 1990s conversely also worried Israeli decision-makers.

Egypt is known to have used chemical weapons in the Yemen civil war - in 1963 and twice during 1967. Reports noted that concerns of a possible use of chemical weapons in the Six-Day War of 1967 prompted Israel to buy thousands of gas masks. However, some sources also noted that the possibility of an Israeli retaliation in kind had prevented the Egyptians from using the chemical option.⁶ During the 1973 Yom Kippur war, Egypt reportedly prepared its chemical arsenal for possible use. Egypt’s military chief also warned

Israel in 1975 of using his country’s non-conventional arsenal if Israel resorted to the use of its nuclear option.⁷

Iraq on its part did extensive research and mass produced various biological agents like botulinum toxin, anthrax, chlostridium perfringens, potent carcinogens like aflatoxin, defoliants, among other deadly ingredients in work that was done at more than 7 research centres.⁸

Deterring WMDs: Nuclear vs Chemical and Biological

To counter the Arab states’ biological and chemical arsenals however, Israel considered biological weapons to be a less effective deterrent than chemical or nuclear weapons. This was due to the lack of visible and immediate effects caused by biological weapons and the relatively long incubation period required for these agents to become active. Also, their effectiveness depended on the method of dispersal, the prevailing weather conditions, among other factors.⁹

In the 1991 Iraq war, Saddam Hussein rained nearly 40 Scud missiles on Israeli population centres. Some analysts have pointed out that the Iraqi leader did behave rationally in not launching biologically or chemically tipped missiles, as that would have made Israel respond “with the same merchandise.”¹⁰

In the aftermath of the war, the Special Means Bureau was established at the Israeli Ministry of Defense to oversee and coordinate all activities in the non-conventional field.

Alleged Use of Biological Weapons

Israel has been accused of using biological weapons in 1948. The charges of alleged usage include the poisoning of wells in Arab villages to prevent them from returning, inducing of a typhoid epidemic in the Arab town of Acre, and attempts to poison wells in Gaza.

In recent times, reports have also speculated that Israel was working on genetically-targeted biological weapons.¹¹ The Palestinian Al-Aqsa Martyr's Brigade has also claimed that they had produced over 20 kinds of chemical and biological weapons after a three-year effort.¹²

Conclusion

The dual nature of bio-technology makes it a double-edged sword. While its positive effects need to be harnessed for society's good, mechanisms like the BTWC have to be further strengthened and effectively implemented. The strong taboo that exists against biological (as well as nuclear and chemical use) is a positive that has to be sustained. Given the concerns generated by an unstable and volatile Middle East, it is to be hoped that countries of the region would find common mechanisms to address their security concerns in a mutually satisfying manner, and not resort to the development or the use of 'weapons of last resort.'

Endnotes:

1. See "Israel Biological Facilities: Organisations and Facilities Overview," at http://www.nti.org/e_research/profiles/Israel/Biological/3649.html
2. Avner Cohen, "Israel and Chemical/Biological Weapons: History, Deterrence, and Arms Control," *Nonproliferation Review* Fall/Winter 2001, pp. 27-53.
3. Cohen, "Israel and Chemical/Biological Weapons," p. 33.
4. See Avner Cohen and Benjamin Frankel, "Opaque Nuclear Proliferation," *The Journal of Strategic Studies*, Vol. 13, No. 03, Sept. 1990, pp. 14-44.
5. See Lionel Beehner, "Israel's Nuclear Programme and Middle East Peace," Council for Foreign Relations, February 10, 2006, at http://www.cfr.org/publication/9822/israel's_nuclear_program_and_middle_east_peace.html
6. See Cohen, "Israel and Chemical/Biological Weapons," p. 42.
7. Ibid.
8. Jeffrey Smith, "Iraq's Drive for a Biological Arsenal," *The Washington Post*, November 21, 1997, at <http://www.washingtonpost.com/wp-srv/inatl/longterm/iraq/stories/112197.htm>; See also Gitty M. Amini, "Weapons of Mass Destruction in the Middle East," Center for Nonproliferation Studies, Monterey Institute of International Studies, available at http://www.nti.org/e_research/e3_24a.html
9. Cohen, "Israel and Chemical/Biological Weapons," pp. 40-45.
10. Gerlad. M. Steinberg, "Parameters of Stable Deterrence in a Proliferated Middle East: Lessons from the 1991 Gulf War," *The Nonproliferation Review*, Fall-Winter 2000, pp. 43-60.
11. See "Israel/Biological/Chronology," at http://www.nti.org/e_research/profiles/Israel/Biological/3652.html
12. *The CBW Conventions Bulletin*, No. 72+73 (September 2006), p. 37. Cited in "Israel/Biological/Chronology: 2004-2007," at http://www.nti.org/e_research/profiles/Israel/Biological/3652_4694.html