

1.0 INTRODUCTION

1.1 Emerging Biological Threats

There is concern that rapid progress in biology, chemistry and the commercialization of biotechnology will have applications to the development of biological and toxin weapons. This paper examines the tremendous increase in our knowledge of recently identified peptides (toxins and bioregulators) that control biological activity. These advances have increased concern about the scope for misuse of toxins and bioregulators as weapons.

The Biological and Toxin Weapons Convention (BTWC), which entered into force in 1975, prohibits the development, production and stockpiling of biological or toxin weapons. The Convention does not address matters related to research. Perfectly legitimate research has continued and the advances have been especially significant, some of which could be considered relevant to the BTWC. Prior to 1975, the production of quantities of peptides that might be considered militarily significant was not possible. Scientific and commercial developments have now made it possible to produce such quantities of peptides. Since 1986, the commercialization of some of the production technologies has expanded to the point that many companies offer for sale quantities of peptides that could have military importance. The discovery of new peptides and the possibility of their large-scale production have increased the threats that the Biological and Toxin Weapons Convention has sought to contain.