
FOREWORD AND ACKNOWLEDGMENTS

This report reviews the biological effects of chemical warfare agents and biological toxins that are of interest because of their possible presence in the Persian Gulf theater of war and because of later concern about their role in illnesses in Gulf War veterans. This material was primarily written in 1997; selected information from 1998, 1999, and 2000 was added later as a result of the review process. I have included the most important of these references, but have not included others because they were not germane or did not change the conclusions.

The reader should note that there is considerable mention of organophosphate and carbamate pesticides here, as there is in the pyridostigmine bromide report (Golomb, 1999a). These chemicals are discussed because they have common mechanisms of action with many military agents and to enhance understanding of the potential effects of both; these chemicals also require consideration when looking at agent interactions. Some subjects, such as delayed neurotoxicity, require analysis of pesticide experience, where they were first discovered. The report on pesticides in this series (Cecchine et al., 2000) is a definitive statement on the matter as it pertains to Gulf War use and effects. Likewise, there is some coverage of stress here, although the stress report in this series (Marshall, Davis, and Sherbourne, 1999) contains the definitive coverage of the matter.

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