

CHAPTER 23

FUTURE DIRECTIONS

The scope and complexity of the Air Force Health Study (AFHS) has required gradual refinement and correction to meet the challenges of changing technology and scientific direction, and to ensure continued participation of all participants.

The selection of procedures to be included in each of the followup physical examinations has been driven by the findings and experiences of the earlier phases of the study. Similarly, changes for the 1992 followup examination will be based on the findings covered in this report. As noted in Chapter 8, the opportunity to measure dioxin accurately in the blood of study participants will significantly enhance the ability to identify relationships between dioxin and medical findings. It is anticipated that additional serum studies to further explore and characterize dioxin half-life will be performed as part of the 1992 examination.

Additional modifications to the examination format being considered for 1992 include enhanced assessments of psychological and neurological status. The evaluation of immune function will continue to be emphasized in the next examination and the current set of skin test reagents will be used; however, modifications may be made in the dosages of the antigens to reflect World Health Organization recommendations. Modifications to the battery of cell surface marker and functional studies may be made to reflect state-of-the-art laboratory practice. Similarly, advances in laboratory technology, such as the use of flurometric enzyme assays for thyroid function, will be incorporated as well.

Statistical methodology in the longitudinal analyses will be modified so that data from all four physical examinations can be included in these important analyses. In addition, it is anticipated that a more complete characterization of sun exposure will be available through the use of data that describe the average hours of daily sunshine at each geographic location.

The next 12 to 16 months will see several significant milestones in the AFHS: (1) completion of the reanalysis of verified birth defect and reproductive outcome data; (2) reanalysis of the 1987 examination data in conjunction with the serum dioxin results; and (3) a mortality analysis of deaths through December 1989. These reports should provide information that will be useful in the resolution of the scientific and political questions surrounding the military use of Agent Orange in Vietnam.