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## WORLD HEMOPHILIA AIDS CENTER

## Report on the World Health Organization Meeting

Safety of Blood and Blood Products in Relation to AIDS  
April 14-16, 1986

Organized by the World Health Organization, a three day meeting on the topic, "Safety of Blood and Blood Products in Relation to AIDS," was held in Geneva, April 14-16, 1986. Prior to this meeting, WHO officials and plasma fractionators met to discuss current LAV/HTLV-III inactivation methods. Thirty-three countries were represented at this meeting, principally by staffs from blood banking or blood transfusion facilities, and a large staff of participants from the Secretariat of WHO, under the direction of Dr. J. C. Petricciani, Chief of Biologicals.

The program began with an overview of infection with LAV/HTLV-III virus, in which information was presented regarding the recognition and identification of two new retroviruses termed, LAV-II and HTLV-IV. The speaker representing Dr. Luc Montagnier stated that the AIDS virus is the first human lente virus and is comparable to the visna virus in sheep. The envelope gene in visna virus is highly variable. The two new viruses have been termed, LAV-II (isolated from two patients in West Africa) and HTLV-IV (isolated in Kakar also in West Africa). These two viruses are not identical, although they have some crossreactivity with LAV-I and LAV/HTLV-III, respectively. The new terminology apparently will be HIV-I (human immunodeficiency virus-I) which is equivalent to LAV-I, to HTLV-III, and to ARV (AIDS retrovirus). HIV-II is equivalent to LAV-II (from West Africa). HTLV-IV remains to be classified. The phylogenetic tree of the human immunodeficiency viruses is being described by amino acid homologies. A long discussion on the clinical safety of immune globulins left one with the impression that these materials are safe from LAV/HTLV-III transmission.

The session on transmission of AIDS by blood and blood products began with a background presentation by Dr. James Allen of the Centers for Disease Control (CDC). A presentation by Dr. Shelby L. Dietrich with information and data relating to patients with coagulation disorders followed. The WHAC survey data were discussed at this time indicating the international scope of the problem.

A review of plasma fractionation methods was followed by a summary of the discussions of the prior meeting devoted to viral inactivation methods and testing. The salient features that emerged were that heat inactivation methods varied greatly from manufacturer to manufacturer and were sometimes confidential. Additionally, test methods used to measure viral inactivation differed and made it impossible to directly compare one method with another.

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The remainder of the Meeting was devoted to discussion of problems of donor exclusion, donor notification of antibody status, and descriptions of programs currently in place dealing with this area of blood safety. A great deal of data relating to ELISA testing and difficulties in interpretation of ELISA and confirmatory test were presented. A formal report will be issued shortly, summarizing the contents of this three day meeting. This report will be included in the next WHAC newsletter.

My overall impressions are as follows:

1. WHO has recognized LAV/HTLV-III infection as a major problem in blood transfusion medicine and is mobilizing (albeit slowly) to offer technical assistance and advice to those member countries interested in and capable of taking steps to prevent LAV virus transmission and to improve the safety of blood supplies.
2. The special problems of patients with coagulation disorders were presented. The worldwide extent and number of AIDS cases in hemophiliacs seemed to be a surprise to many persons in attendance.
3. Measures already in place in the United States, including voluntary or mandatory exclusion of high-risk donors from blood/plasma donation and testing of blood/plasma donations for LAV/HTLV-III antibody seem reasonable, feasible, effective, and, most of all, achievable steps to take towards improvement of the safety of blood and blood products. However, implementing these measures is extremely difficult in many countries where significant economic barriers will prevent immediate access to "high-tech" testing and where the infrastructure of the blood banking system is in early stages of development.
4. The most immediate results of this WHO meeting may be the development of standardized viral inactivation tests and the setting of minimum inactivation standards for plasma products. If these steps are taken expeditiously, the quality of plasma products will improve with resulting medical benefits to patients with clotting disorders.
5. In many parts of the world, particularly Africa, implementation of the steps mentioned above, exclusion of high-risk donors and LAV/HTLV-III antibody testing, will be a formidable task.
6. The World Federation of Hemophilia should attempt to maintain contact with those countries\* represented at this meeting, since interest in AIDS and safety of blood and blood products may indirectly reflect interest in improving availability of blood and blood products for hemophiliacs in certain countries.

\*Countries represented at WHO meeting: Australia, Belgium, Brasil, Canada, Denmark, Egypt, Finland, France, Gambia, Federal Republic of Germany, Hungary, India, Indonesia, Italy, Jamaica, Japan, Malaysia, The Netherlands, Nigeria, Portugal, Republic of Central Africa, Singapore, Spain, Sri Lanka, Sweden, Switzerland, Thailand, United Kingdom, United States, U.S.S.R., Zaire, Zambia, Zimbábawe.