

- Because drug-resistant organisms, such as those causing gonorrhea, pneumonia, tuberculosis, typhoid, dysentery (shigella), and malaria (*Plasmodium spp.* ) spread rapidly, there is a need for coordinated action on an international scale to provide worldwide protection against them.

International collaborations to apply existing vaccines -- such as the World Health Organization's Expanded Programme on Immunization -- have met with great success (see section VII). But comprehensive infectious disease control involves more than just more efficient delivery of currently available vaccines; new and improved vaccines must be developed and made available at affordable costs to immunization programs in developing countries. Traditionally, most vaccines have been developed for use in the industrialized world in the private sector and then have been introduced, as costs have fallen, in less developed countries. As a result, vaccines have not yet been successfully developed against some of the major causes of death in less developed countries (such as malaria); for other vaccines currently in use in the United States, the epidemiological appropriateness and applicability for their use in developing countries remain in question. Even when vaccines are of proven value, such as that for hepatitis B, the cost remains prohibitive for many years for a large segment of the world's population for which it would be highly beneficial.

Action has been taken to address these concerns. The U.S. Government has directly supported international research efforts in vaccine development through its support for the Special Programme for Research and Training in Tropical Diseases, a collaborative undertaking of the United Nations Development Programme, the World Bank, and the World Health Organization, and more recently for the Children's Vaccine Initiative (see section VI). In addition, the United States, through the U.S. Agency for International Development and the National Institute of Allergy and Infectious Diseases, has directly supported epidemiological studies, vaccine field trials, and cost-effectiveness studies at many sites, including the International Centre for Diarrhoeal Disease Research in Bangladesh (ICDDR,B), the Medical Research Council in Gambia, and the Institute for Medical Research in Papua, New Guinea.

Just as basic vaccine research on infectious diseases conducted in the United States will ultimately benefit the global community, international activities supported by the U.S. Government will ultimately result in a lower risk of diseases entering the United States and in reduced risk for U.S. travelers and military personnel overseas. For this reason, Congress has called upon the National Vaccine Program (through P.L. 99-660) to conduct activities that would "fulfill commitments of the United States to prevent human infectious diseases in other countries." The National Vaccine Plan therefore integrates international activities under the relevant thematic goals and objectives.