PARTICIPATION OF THE PAN AMERICAN SANITARY BUREAU IN ACTIVITIES FOR THE CONTROL OF CHAGAS' DISEASE

(Item Submitted by the Government of Argentina)

Chaga's disease is found from the southern part of the United States of America to the southern tip of Chile and Argentina, and in all the countries of the Americas that lie between those two limits.

The highest prevalence of the disease is found in South America and the two countries most affected are those located at its extremity.

For Brazil, Uruguay, Bolivia, Paraguay, Chile and Argentina the disease is a serious health problem.

A WHO study group on Chagas' disease estimated that about 35 million persons were exposed to the risk of infection by Trypanosoma Cruzi.

The average infection rate obtained in epidemiological surveys in several countries is 20%; consequently the number of persons infected by the parasite is not less than 7,000,000.

In Argentina, Chagas' disease is endemic in 21 out of its 24 constituent political units; together they occupy an area of 2,800,000 km² with a population of 13 million inhabitants, all of whom are exposed to the infection.

Within the country, the disease is unevenly distributed, the rural and peri-urban areas being more infected than the urban; the highest infection rates are found in rural areas in the center and north of the country. Estimates based on certain studies indicate that 1.8 million persons are infected, 20% of whom suffer from cardiac lesions caused by the disease.

Although the disease attacks all age-groups, the problem is particularly severe in children; in some areas prevalence is as high
as 25% in unweaned children, and more than 50% of the persons suffering from the acute form of the disease are under six years of age.

The epidemiology of this disease calls for a vector in which the parasite completes its development. In Argentina, this vector is *Triatoma infestans*, although there are another fifteen known species of reduviid bugs potentially capable of maintaining the zootic and zooanthropotic cycle.

Cases of the infection have been reported in *Vertebrata* and there have been cases of human infection in all the countries of the American Continent.

Outside endemic areas, a great number of blood donors (about 5% of the city of Buenos Aires) have proved to be infected, a finding which is related to the migration of persons from rural to urban areas.

To give a complete picture of the seriousness of the problem, mention must also be made of the fact that there is no effective treatment for the "constituted" disease or the acquired infection.

At present, two medicaments are used to attenuate or curtail acute symptoms - in a remarkable fashion in some cases. However, both products only act on the hematic forms of the parasite and not on the intracellular forms.

Obviously the most affected segments of the population are the most ignorant and economically under-privileged, since insanitary housing is a major epidemiological factor.

An analysis of the data on the prevalence of the disease in Argentina shows that the cost in terms of loss of salary, loss of productivity, and medical expenses amount to $250 per patient per year.

If we multiply this cost by the annual number of patients - well over 200,000 - we arrive at a figure for the cost of Chagas' disease in Argentina alone of more than 50 million dollars. In addition to the harm done by the disease, expressed purely in monetary terms, there is the incalculable value of human life and of ill health as well as the impact of the disease on the emotional and social state of the population.

This general picture, which is truly significant, justifies intensive efforts to control the disease; and in view of the problems connected with and unanswered questions about the biology of the vector and the conditions under which the infection is transmitted, and the inefficiency of present therapy, it is essential to
support countries in their endeavors to control the disease. From both the technical and financial standpoint the magnitude of the problem justifies international assistance and the coordination of activities to control or eradicate the disease.