

# Can AIDS be spread by mosquitoes?

by Dr. Ricardo Veronesi

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*This article was submitted in the wake of the controversy that erupted at the conference.*

AIDS and mosquitoes. Since that subject has aroused a polemic in the press between our opinion, on the one side, and those of the Health Ministry's public health authorities, the São Paulo Health Secretariat, and the U.S. Centers for Disease Control on the other, we would like to use the strongest argument put forward by those who deny the possibility of AIDS transmission by flies, mosquitoes, lice, fleas, and other arthropods, to demonstrate that they are ignorant of the most elementary principles of epidemiology. We see:

The Atlanta Centers for Disease Control (and the "parrots" who do not use the logic of reason) argue, "If the AIDS virus were being transmitted by flies, mosquitoes, etc., why would children (0-14 years) be saved? Don't flies, mosquitoes, and lice like to suck children's blood?" It is necessary to inform such "epidemiologists" of the following facts:

1) Diseases transmitted by arthropods are less prevalent among children (0-14 years) than among adults. The diseases which prevail among children are transmitted by respiratory means (e.g., measles), by ingestion (e.g., poliomyelitis, diarrhea, from viruses and bacteria).

2) The AIDS disease is not common among U.S. and European children (relative to adults), and, even in São Paulo (though here the incidence among youth is double that found

in the United States), but not so in Africa. The Panos Institute in London reports that in 1987, Gabon, with 5 million inhabitants, will have 6,000 AIDS cases among children, while the United States has only 500 infantile AIDS cases, with a population of 240 million. The African model is, thus, completely different from the American and European model.

3) Malaria, a disease which incontrovertibly is transmitted by the *anopheles* mosquito, also has a low incidence among children. According to the state epidemiological service of São Paulo, SUCEM, among the 2,686 cases registered in 1986, the age distribution was as follows:

- 0.18% in infants under one year;
- 2.08% in the 1 to 5 age group;
- 1.89% in the 5 to 9 age group;
- 2.38% in the 10 to 14 age group.

According to the "epidemiologists" at the CDC in Atlanta and those of the Brazilian Health Ministry and São Paulo Health Secretariat, it is highly unlikely that malaria could be transmitted by mosquitoes, given this age distribution of cases in Brazil. This is simply unbelievable!

4) We should also emphasize that in September, the U.S. Congress named a commission of scientists (including Nobel Prize winner Baruch Blumberg) to give their opinions on the subject. It concluded that the possibility exists for AIDS to be transmitted mechanically by arthropods, and that the probability of it is greater in regions where conditions are propitious for that to happen. It recommended that the CDC and scientists the world over investigate the subject more profoundly.

5) The strongest argument supporting the possibility and probability of HIV transmission by arthropods is that for at least 50 years, it has been verified that the virus causing infectious anemia in horses, *retroviridae* family, *lentivirinae* subfamily, a first cousin of HIV, is transmitted from horse to horse and even to man by bites from the Motuca fly. The same could be said for bovine leukemia.

Finally, we must report that in nearly 50% of Brazilian territory, living conditions and environment (housing, sanitation, malnutrition, promiscuous sexual practice among homosexuals, cultural norms, density of flies, mosquitoes, fleas, bedbugs, and lice) are identical to those found in the most underdeveloped regions of Africa, where the epidemiological model of AIDS is completely different from that of America, Europe, and São Paulo. And we must also consider that the HIV-2 virus, which we detected for the first time this year in the Americas in São Paulo, in two dozen inhabitants of that city, showed itself able, in the laboratory, to survive for many hours in mosquitoes, just as has been demonstrated with HIV-1, prevalent in the United States, Europe, and Brazil.

Though arthropods may not yet be transmitting AIDS in the United States and Europe, it is highly probable that they are already doing it in Africa and, perhaps, in Brazil. It is better to spread panic than AIDS.