



CONSIDERATION ON THE PREVENTION, CONTROL AND EPIDEMIOLOGIC SURVEILLANCE OF VAMPIRE BAT-TRANSMITTED RABIES IN MAN IN THE AMERICAS¹

According to the information provided to the Pan American Zoonoses Center (CEPANZO) by the countries of the Region, at least 177 persons died of vampire bat-transmitted rabies since 1980. These accidents, most of them not confirmed by the laboratory, occurred in 8 countries. The greatest number of deaths (73) were reported in 1989, Brazilian and Peruvian outbreaks accounting for most of them.

The study of 92 clinical histories available at CEPANZO showed that the majority of those cases occurred in sylvatic areas, and that none of the victims had received complete and timely preventive treatment.

TABLE 1
VAMPIRE BAT-TRANSMITTED RABIES IN MAN IN THE AMERICAS.
1980-1990

COUNTRY	YEAR												
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	To	
Argentina					1								1
Brazil	2				2	8	4	1		3	7		26
Colombia								3	4	2			9
Cuba									1	1			2
El Salvador	1				2				1	1	1		6
Mexico	1				4	6	5	8	4	3	3		33
Peru			11		17	2	2			62			84
Venezuela	1				2					1			4
Total	5	...	11	...	28	16	11	12	10	73	11	...	177

...Information not available

¹ Discussion guide prepared by the Pan American Zoonoses Center of the Veterinary Public Health Program. PAHO/WHO.

A high proportion of the cases were reported among temporary workers engaged in mining, timbering, and other activities implying the movement of human groups within vampire bat habitats. In these areas, livestock breeding activities are usually scarce or nule. Also an indian community settled in the Amazon region was involved.

Official report derived from visits to the affected areas remark the following observations, considered to be of sanitary and epidemiologic significance:

- a) Health care facilities are precarious and hardly accessible.
- b) Antirabies serum and vaccine were unavailable when needed. In addition, socioeconomic and cultural characteristics of the populations at risk let people to not ask for, or to interrupt, antirabies treatments.
- c) Health authorities came to know of the outbreaks when several human cases had already occurred, and epidemiological information was made available several weeks afterwards. Prevention and control measures taken were insufficient to avoid the presentation of new cases in man.
- d) At the beginning, people did not associate vampire bites with rabies. However, when the disease was confirmed, the community offered their cooperation and support to face the emergency.
- e) Information obtained through the epidemiologic investigation of one of the outbreaks made it evident that behavioral changes had occurred among the bats, and that the number of persons bitten had increased. These might be important warnings for any information and epidemiologic surveillance system.

The above give rise to the following comments:

- a) It is of utmost importance that health authorities reach a decision about the implementation of information mechanisms for the prevention and control of vampire bat-transmitted rabies in those areas where it actually is, or could become, a problem.
- b) Due to the particular characteristics of the affected areas, it is absolutely necessary that community be encouraged to participate in the planning and carrying out of rabies prevention activities, as well as in the assistance of eventual victims.
- c) To that end, health agencies should develop health education programs pointed at funding the community on the proper way and time to participate in the surveillance, prevention and control activities against this zoonosis.

d) Communities should organize themselves in order to maximize their efforts for an efficient accomplishment of their targets: the early detection of the problem and the rapid and adequate treatment of persons exposed.

e) It is the ineluctable responsibility of health agencies to ensure the timely and enough availability of supplies and biologicals required for the carrying out of effective prevention and control activities.

Finally, we thought it would be useful to end with a short reference to Epidemiologic Surveillance, Community Participation, and Organization of Health Care Services, relevant background concepts to the discussions and suggestions to be made in relation to vampire bat-transmitted rabies prevention and control to the medical attention of persons exposed to the infection.

EPIDEMIOLOGIC SURVEILLANCE

It is a dynamic process involving the careful and continued monitoring of events involved in the introduction and propagation of an infection or disease, as well as of all those factors which might increase the risk. It include data gathering, recording, analysis and epidemiological interpretation, as well as a prompt and efficient dissemination of information and recommendations, in order to enable higher organizational levels to make a rapid decision on the introduction of corrective measures.

COMMUNITY PARTICIPATION

It is the acting engagement of the organized community members in the discussion, making of decisions, and control of actions aiming at the meeting of their health needs, what implies to accept and comply with responsibilities and obligations deriving therefrom.

ORGANIZATION OF HEALTH CARE SERVICES

It is the functional organization of resources available to meet, timely and adequately, the health needs of a community, with the exception of those requiring highly specialized technology.