

# A personal history of veterinary public health in the Pan American Health Organization

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## Summary

The introduction of disease into the New World changed both flora and fauna. The need for coordinated veterinary public health activities was highlighted when anthrax and encephalitis were reported in native populations. The Pan American Health Organization has been a proponent of public health and animal health since its inception. Neither discipline can be successful without the other.

## Keywords

Animal, Health, Pan American Health Organization, Public health, Veterinarian.

## Una storia personale di sanità pubblica veterinaria all'interno dell'Organizzazione Panamericana della Sanità

### Riassunto

*L'introduzione nel Nuovo Mondo di nuove patologie ha provocato cambiamenti sia nella flora sia nella fauna. Si è resa evidente la necessità di un servizio coordinato di attività di sanità pubblica veterinaria quando sono stati registrati casi d'antrace e d'encefalite nella popolazione locale. L'Organizzazione Panamericana della Sanità si è resa promotrice di servizi coordinati di salute pubblica e sanità animale sin dal principio. Nessuna delle due discipline può avere efficacia senza l'altra.*

### Parole chiave

Animali, Organizzazione Panamericana della Sanità, Salute Pubblica, Veterinaria.

The zoonotic diseases were unknown in the Americas until the European explorers came in the 16th century with their domestic animals to South, Central and North America. The earliest recognised disease was rabies, in the 17th century in Mexico. Thereafter, in the 18th century, there are reports of rabies in the West Indies and later in South America and North America. In the 19th century, the importation of improved breeding stock brought tuberculosis, brucellosis, foot and mouth disease (FMD) and other zoonoses, including anthrax, enteric diseases and no doubt many parasites that affected human beings.

The investigation of an anthrax epidemic in Haiti between 1943 and 1945 that killed thousands of animals and caused extensive human illness and deaths was the event that precipitated a need for a Veterinary Public Health Service. A summary of the investigation was made to the former Surgeon General of the United States Public Health Service (USPHS), Hugh Cumming 1920-1935, who served in a dual role as Director of the Pan American Sanitary Bureau (PASB) from 1920 to 1946). He expressed interest in the April 1945 anthrax report and veterinary public health (VPH) problems in Haiti and the Dominican Republic. I recommended that a Veterinary Public Health programme be inaugurated in the PASB. Cumming told me to take it up with his staff, namely with Dr Bustamente (Mexico) and Dr Pena (Brazil). They responded favourably.

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A year later, in November 1946, the PASB received a request for assistance to investigate an outbreak of equine encephalomyelitis in horses and children in Panama. Dr Bustamente called me to ask if I could arrange to go to Panama to investigate the epidemic. After obtaining the USPHS approval, Karl Habel, a noted NIH virologist and I arrived in Panama via the United States Navy air transport two days later. We were immediately taken up country to David near the Costa Rican border. As soon as we saw the horses staggering and thrashing we agreed that the disease was equine encephalomyelitis which had been previously described in Panama as eastern equine encephalomyelitis (EEE). The diagnosis of EEE was later confirmed at the NIH along with the recovery of EEE virus from *Mansonia* mosquitoes.

Habel visited the children hospitalised where he made a diagnosis of their illness as poliomyelitis. There were no EEE infections among the children. Few cases have been reported in children except for the Massachusetts 1939 epidemic. EEE is enzootic in the Americas. There are effective equine vaccines that prevent disease in horses. Songbirds are the principal reservoir.

In 1947, Fred Soper was appointed Director of the old PASB which was now reorganised as the Pan American Health Organization (PAHO). He was interested in zoonoses, especially after he established that yellow fever could infect native monkeys and they became the reservoir in rural South America. The reported outbreak of FMD in Mexico in January 1947 interested him greatly. He offered PAHO assistance. This was the first time that PAHO had ever expressed an interest in the control of an animal disease; FMD rarely affects humans. Subsequently, he encouraged the VPH programme to establish a FMD centre in Rio de Janeiro in 1950 which is referred to later.

Aurelio Málaga Alba was the first VPH consultant appointed by Soper in 1948 and served in this position until Soper recruited Ben Blood in May 1949.

Blood had been a United States Army Veterinary Medical Officer during the 1942-1946 war in Europe and Korea. After leaving the United States Army, he attended the Harvard School of Public Health where he earned a Master of Public Health.

Soper encouraged Blood to establish a Zoonoses Center which he did in Azul, Argentina, in 1952, that was later moved to Buenos Aires. Blood also inaugurated the FMD Laboratory near Rio de Janeiro. These two centres came to be recognised for outstanding services to the public health and animal health needs of South America.

Abraham Horwitz, a distinguished Chilean public health administrator, followed Soper on retirement in 1959. Blood left shortly thereafter. Pedro Acha was then appointed after a search of candidates by Charles Williams and myself. Acha was a young man who had some public health experience in Peru and earned an MPH at the University of California. He was a dynamic leader who obtained support from the World Bank and other lending agencies to expand the VPH programme with consultants in all regions and countries. In nearly twenty years, he built a VPH programme for the Americas that is a model for the World Health Organization's Regional Offices in Africa and Asia. He stimulated many programmes. He initiated a United States/Mexico Border rabies control programme with USPHS support that brought rabies under control on the border. He died an untimely death (throat cancer) in 1988. He is remembered by a multitude of public health scientists and workers throughout the Americas.

Héctor Acuña, a Mexican Health official, succeeded Horowitz in 1975. He gave Pedro Acha support and encouraged the expansion of VPH country representatives.

Mario Fernandez, a Portuguese scientist who earned his doctorate in virology at the Wistar Institute in Philadelphia, was Director of the FMD centre for some years before being appointed as the Director of the VPH programme. He provided scientific leadership to all the PAHO/VPH programmes and

directed more attention to the use of epidemiology in the control of FMD. He was a good administrator and won recognition for his service to PAHO. He served under the Brazilian public health administrator, Carlyle Guerra de Macedo, who supported VPH and the concept of FMD eradication.

Joe Held, an esteemed Chief Veterinary Officer and Assistant Surgeon General of the USPHS followed Mario Fernandez. He was Director of the Zoonoses Center for some years after retirement from the USPHS in 1984. He was head of the VPH programme from 1987-1990.

George Alleyne, Director from 1995 to 2003, a Barbados native had a great interest in the VPH programme and supported Primo Arámbulo who succeeded Joe Held in 1990. The VPH programme has gained international recognition with the success of FMD control and eradication in southern South America. The goal is control and eradication in the foreseeable future (2009). The success of urban rabies control is another achievement worthy of world recognition. The support to eliminate tuberculosis and brucellosis although limited has benefited public health and the rural economy.

The world lost a great leader of VPH when Joe Held passed away on Monday 29 October 2007.

In spite of the progress, there remain problems. Food safety is the most important of these problems. The adoption of international standards for hazard analysis and critical control of contamination is a step forward. My own observations in southern South American provide evidence that good hygiene and management exists in many countries. The promotion of pasteurisation by thermal means as well as irradiation will contribute to the control of all foodborne diseases, especially the enteric and parasitic diseases. On previous occasions I have acclaimed the PAHO VPH programme as the world model. It is the best. It has been a great pleasure and experience to be a consultant and friend the Directors of PAHO and the leaders of veterinary public health in the America for some 60 years.

We are delighted that the PAHO will continue to benefit from the guidance of Mirta Roses Periago, an excellent public health scientist and administrator who was unanimously re-elected for a second term of office as Director of PAHO in October 2007.

Finally, I must say how much I have valued working with Albino Belotto since he joined PAHO.

