

Plagas), el cual se concibe como un sistema de control que considera el medio ambiente en el que vive la plaga, su dinámica poblacional, previendo consecuencias ecológicas y económicas, seleccionando métodos de control para reducir las poblaciones por debajo del daño económico, de salud animal y salud pública. Por medio de una campaña de Educación Sanitaria que comprende mil quinientas charlas y demostraciones de métodos a más de quince mil ganaderos y estudiantes se ha logrado concientizar al productor ganadero para que no elimine las especies benéficas en sus fincas.

### CO.65 SUSCEPTIBILITY OF *MYOTIS LUCIFUGUS* TO HETEROLOGOUS AND HOMOLOGOUS RABIES VIRUSES.

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Rabies virus (RV) maintenance in bats is not well understood. *Eptesicus fuscus*, *Myotis lucifugus*, and *Tadarida brasiliensis* are the most common bat species in the US. These colonial bat species also have the most frequent contact with humans and domestic animals. However, the *Lasiurus noctivagans*/*Perimyotis subflavus* (*Ln/Ps*) RV is associated with the majority of human rabies virus infections in the United States and Canada. This is of interest because the *L. noctivagans* and *P. subflavus* bat species are more solitary bats with less frequent human interaction. Our interest was to determine the likelihood of a colonial bat species becoming infected with and transmitting a heterologous RV. To determine the potential of heterologous RV infection in colonial bat species, *M. lucifugus* bats were inoculated with a homologous or one of two heterologous (*E. fuscus* and *L. noctivagans*) RV. Additionally, to determine if the route of exposure influenced the disease process, bats were inoculated either intramuscularly (i.m.) or subcutaneously (s.c.) with a homologous or heterologous RV. Bats were observed for 6 months. Survivors were challenged i.m. with a homologous RV and observed for an additional 6 months. Our results demonstrate intramuscular inoculation results in a more rapid progression of disease onset as compared to a significantly longer incubation time in bats inoculated s.c. Additionally, cross protection was not consistently achieved in bats previously inoculated with a heterologous RV following a six month challenge with a homologous RV. Finally, bats that developed rabies following s.c. inoculation were significantly more likely to shed virus in their saliva and demonstrated increased viral tissue tropism. In summary, bats inoculated via the s.c. route are more likely to shed virus thus increasing the potential for transmission.

### CO.66 CDC'S GLOBAL DISEASE DETECTION PROGRAM AND THE INTERNATIONAL HEALTH REGULATIONS: PROVIDING EARLY WARNING TO CDC FOR HUMAN RABIES OUTBREAKS

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In 2003, the spread of SARS alerted public health leaders that novel pathogens could be transmitted along international travel routes with unprecedented speed. With the realization that an outbreak anywhere in the world was a potential threat to virtually all countries, the United States Congress in 2004 authorized the appropriation of funds to establish a Global Disease Detection

(GDD) program, based at the CDC, with the aim of promptly detecting and mitigating the consequences of emerging threats. The GDD program provides a platform to develop and strengthen global capacity to rapidly detect, identify, and contain emerging infectious disease and bioterrorist threats in line with the International Health Regulations (IHR), which entered into force in June 2007 and legally requires all signatory nations to establish systems to detect and respond to new disease threats. The GDD program was subsequently selected by WHO as a key partner to help implement the IHR (2005) for its 194 member states and in 2009 was designated a WHO Collaborating Center for Implementation of IHR National Surveillance and Response Capacity. A significant component of GDD is the GDD Operations Center (GDDOC), an epidemic intelligence unit which uses novel, event-based surveillance techniques to provide CDC programs with a single source of reliable, comprehensive, and high quality information on international disease outbreaks, and provides logistical and financial support to CDC programs for emergency deployments to international outbreaks. Technological advances have revolutionized the way information is accessed, and event-based surveillance provides a mechanism for the organized and rapid collection and verification of information about events that are a risk to public health, particularly with regard to emerging zoonoses, which countries sometimes cannot or do not report to the global public health community. A re-emerging, global zoonosis that the GDDOC actively monitors is rabies in both animals and humans. Since 2009, the GDDOC has supported provided epidemiologic, logistical, or financial support to CDC's Rabies Program for emergency deployments to the Dominican Republic, Peru, Ecuador, and Kenya to mitigate outbreaks of human rabies associated with canine and vampire bat rabies. Because of the GDDOC's work to actively identify and report rabies-related event-based surveillance data to CDC's Rabies Program, CDC is better positioned to respond to a request for technical assistance by the affected country and establish core capacities in compliance with IHR.

### CO.67 RESULTS WEBSITE FOR RABIES DIAGNOSTIC CONSULTATION INTO THE HEALTH SERVICES OF COAHUILA, MEXICO.

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**Background:** Health Services of Coahuila had not a rabies diagnostic laboratory. It was needed to send samples to Nuevo Leon and InDRE to solve this limitation. On April, 2010, the State Authorities established this laboratory that is placed inside the facilities of the State Laboratory of Public Health. On July, 2010 the laboratory formalized operations with the InDRE. The laboratory has 2 employees: a professional diagnostics specialist and a laboratory technician. **Challenges:** Sample shipments for rabies virus monitoring to other states. Extemporaneous reception of other states results. No clear idea about rabies virus circulation and sanitary risk status in the State. Expensive operational costs. Several criteria of rabies PEP based on lab results. The laboratory had not a working algorithm for technical and epidemiological reports as well as for laboratory results. The lab had not a standard protocol to establish a timely diagnostic. **Alternatives of Solution:** To develop a feasibility study for the operation of a rabies diagnostic laboratory and to identify the mechanisms and support elements to establish this laboratory. Review the operative and financial plans and rabies vaccines availability for PEP. Website design for electronic consultation via Internet, to get the timely diagnostic according with the needs and request from the operative units. **Operation:** The Epidemiological surveillance of rabies in the State is