

### **EDITORIAL**

This month, as I sit down to write my editorial for the Newsletter, I cannot help but reflect on the life and contributions to the field of rabies made over the last few decades by our dear friend and colleague Dr. George Baer, who died on June 2nd 2009. George had a brilliant idea and certainly a futuristic vision about how to approach human rabies prevention through oral rabies vaccinination for animals. Thank goodness for all of us, he never gave up on that vision. In spite of initial skepticism from others, George managed to convince rabies experts that there could be an effective way to solve the problem of administering rabies vaccines to wild animals. As we look at the impact of George's quest to develop an efficacious oral rabies vaccine, it is clear that he initiated the development of one of the most powerful tools that we currently have at our disposal to eliminate rabies. It is fair to say that everyone, even remotely connected with rabies prevention activities, was somehow affected by the work of Dr. George Baer. Our heartfelt condolences go out his family.

I also want to bring to your attention a story in this issue of our Newsletter discussing progress in human rabies prevention activities in India. The production and utilization of sheep brain nerve tissue rabies vaccine was halted in India about four years ago and was replaced with modern cell culture rabies vaccines. As you will read in the article submitted by Dr. Omesh Bharti, India has now endorsed the use of Intradermal PEP and has begun to implement its administration in large anti rabies clinics in several states. Many of the anti rabies clinics where Intradermal PEP is being now being introduced, will treat between 100 to 200 new dog bite victims every day. Thus the use of Intradermal PEP will serve as a means to save as many lives as possible while reducing the financial burden of PEP throughout the country. We hope that this particular article is the first in a continuing series of articles from our colleagues in India and we invite the submission of additional articles from our colleagues working diligently in India to reduce the number of human deaths caused by this horrific disease.

Dr. Deborah Briggs, Executive Director of the Alliance

### **DR. GEORGE MARTIN BAER**



Dr. George Martin Baer, died on June 2, 2009, in Mexico City, Mexico, at the age of 73. He was an eminent virologist, veterinarian, and public health scientist.

Dr. Baer was born in 1936 in London, England and grew up in New Rochelle, New York, where he became an accomplished equestrian, and began a lifelong love of animals. He attended Cornell University, where he obtained degrees in agricultural sciences and veterinary medicine in the 1950s, and the University of Michigan at Ann Arbor where he earned a Master's degree in Public Health in 1961. Thereafter, Dr. Baer started his career in public health with the Centres for Disease Control (CDC), working on brucellosis, psittacosis, and rabies. In 1964, he worked at CDC's Southwest Rabies Investigations Laboratory in Las Cruces New Mexico on bat rabies. From 1966 to 1969, he was a

consultant to the Pan American Health Organization in Mexico laying the groundwork for Mexico's public health programs against rabies, an effort he continued throughout the rest of his professional life.

In 1969, he returned to CDC and became the head of the Rabies Laboratory. With his team of researchers, he developed a method for the immunization of wildlife, for which he was credited as the "Father of Oral Rabies Vaccination". His considerable expertise made him one of the foremost international experts in this arena. Of his more than 100 publications, his 1991 book, The Natural History of Rabies, remains a definitive reference in the field.

After retirement from CDC, he founded a diagnostic laboratory in Mexico City, and was a member of the Mexican International Steering Committee for the Rabies in the Americas Conference. At the time of his death, he was working on a new vaccine for influenza, a timely project given the recent outbreak of the H1N1 virus. Clearly, Dr. Baer acted from a deeply held belief in the power of preventive medicine, within the 'one health' concept to combat disease both in humans and other animals. He is survived by his wife, Maria Olga Baer, three daughters, Katherine, Alexandra and Isabella, and four granddaughters. His funeral was held in Mexico City at the Iglesia de Santa Rosa de Lima on June 4, 2009.

Adapted by Louise Taylor from a press release from the CDC

### **New ACIP Recommendations for Human Rabies PEP**

On June 24, 2009 the Advisory Committee on Immunization Practices (ACIP) accepted a recommendation from the ACIP rabies work group to reduce the number of rabies vaccine doses for postexposure prophylaxis (PEP), from 5 doses to 4 doses for most individuals. The new recommendations will not become official until accepted by the CDC Director and published in the Morbidity and Mortality Weekly Report (MMWR), expected in the next few months. Implementation of these new recommendations should begin following their publication.

The ACIP is a US government committee that develops written recommendations for the routine administration of vaccines to children and adults in the US civilian population; recommendations include age for vaccine administration number of doses and dosing interval, and precautions and contraindications. The rabies work group conducted an extensive review of historical rabies studies and current literature concerning the pathogenesis of rabies virus, clinical vaccine trials, animal studies, epidemiologic surveillance, and health economics to determine the immunogenicity, effectiveness, and safety of a 4 dose PEP vaccination regimen. The panel found significant evidence to suggest that 4 doses of vaccine elicited an immunological response equivalent to the 5 dose series.

The new recommendations for PEP are 4 doses of human rabies vaccine given on days 0, 3, 7, and 14 and eliminate the previously recommended 5th dose on day 28. All other PEP recommendations as defined in the 2008 ACIP recommendations on human rabies prevention (e.g. exposure assessment) remain unchanged. Human rabies immune globulin (HRIG) continues to be recommended (20 IU/Kg) on day 0 for persons not considered previously immunized for rabies.

Written by Louise Taylor based on information posted on the CDC rabies website. Relevant questions and answers regarding updated ACIP rabies vaccination recommendations are available at www.cdc.gov/rabies/qanda/ACIP4dose.html. The 2008 ACIP recommendations are available via this page, or the Alliance website, under About Rabies/Scientific Literature

## **NON-SURGICAL STERILANTS CAN ENHANCE RABIES CONTROL**

In late 2008, the Found Animals Foundation and its strategic partner the Alliance for Contraception in Cat & Dogs (ACC&D) announced a pledge of \$75 million for the creation of a non-surgical sterilant for cats and dogs. The Found Animals Foundation has put forth the \$25 million Michelson Prize in Reproductive Biology along with the companion Michelson Grants program which offers up to \$50 million to advance research on promising non-surgical approaches. The announcement was covered in USA Today, Forbes, the Wall Street Journal and even on Saturday Night Live.

The link between managing populations of free-roaming dogs and controlling the spread of rabies is intuitive and has been demonstrated in community practice and research. One study in Jaipur, India demonstrated the effectiveness of combining vaccination with sterilization through TNVR (trap/neuter/vaccinate/release). The author writes,

"A programme to sterilise and vaccinate neighbourhood dogs against rabies was established in Jaipur, India. Neighbourhood dogs were captured humanely, sterilised surgically, vaccinated against rabies and, when they had recovered, released where they had been caught. Between November 1994 and December 2002, 24,986 dogs were treated in this way. Direct observational surveys of the local dog population indicated that 65 per cent of the females were sterilised and vaccinated, and that the population declined by 28 per cent. The records of human cases of rabies seen in the main government hospital of the city between January 1992 and December 2002 showed that the number of cases had declined to zero in the programme area but increased in other areas".

Mexico's lauded government rabies control program includes roughly 175,000 sterilization surgeries annually. In an effort to expand that impact they tested Neutersol<sup>®</sup>, the first non-surgical sterilant approved in the U.S., in 10,000 adult male dogs. That product is now available in Mexico under the name EsterilSol<sup>™</sup>, where it can be purchased by government and non-profit campaigns for \$6USD per dose (less for smaller dogs). Plans are underway to expand the product to other Latin American countries and beyond. For more details visit www.arksciences.com

ACC&D advocates humane sterilization methods that involve less time, money, and other resources, thereby allowing more wide-spread use of sterilization programs. ACC&D's aim is to create a tool (or tools) for use by shelters and government programs for homeless or underserved animals. The Michelson Prize and Grants are worldwide in scope, and Letters of Intent from researchers are being accepted now. Visit www.foundanimals.org for more details.

ACC&D is pleased to count the Alliance for Rabies Control as one of more than 100 Organizational Partners. The overlap between population control and rabies control is clear, and ACC&D is eager to advance work that meets both objectives.

G. Robert Weedon, DVM, MPH of ACC&D's Board of Directors is also an ambassador for the Alliance and is actively seeking and pursuing other opportunities for collaboration. Besides his private practice work in North Carolina, Dr. Weedon serves on the boards of Public Health Foundations in New Hanover County and at the University of North Carolina, has written and lectured on rabies control and participated in several World Rabies Day events . He is working on a collaborative effort between the Alliance, the UNC Gillings School of Global Public Health, the Public Health Foundation of India, and the College of Veterinary Medicine at North Carolina State University to work on zoonotic diseases in India. "New product ideas that combine rabies inoculation with long term contraception could provide an obvious benefit for animal and human health.", he writes.

Contributed by Joyce Briggs, President, Alliance for Contraception in Cat and Dogs, info@acc-d.org. Visit www.acc-d.org to learn more and to subscribe to e-mail updates. The study in Jaipur quoted is by J. F. Reece and S. K. Chawla and the reference is The Veterinary Record, Sept 16th 2006, v159, p379-383

### **RABIES IN ANTELOPES IN NAMIBIA**

A report from ProMed on June 19th, details an outbreak of rabies in antelope in Namibia. The massive outbreak, affecting kudu antelopes (*Tragelaphus strepsiceros*), began early in 2008 in Namibia. Data collected from a helicopter count in the Khomas highlands during the winter months of 2008 indicated that some 500 kudu bulls had succumbed to the disease. It is estimated that over 20,000 antelopes have died during the current epizootic.

Similar rabies outbreaks have been observed in the past, with the largest one occurring during the years 1977-1985, when an estimated loss of 30-50,000 antelope (20 per cent of the population) was reported due to the apparent oral spread of rabies virus between individuals. The social behavior of kudu is believed to be the contributing factor in transmission of rabies in this species through contact of infected saliva via mouth lesions that occur during browsing of thorn bushes.

The report and discussion can be followed at www.promedmail.org, archive number 20090619.2258



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### **ASEAN+3** COUNTRIES HOLD WORKSHOP ON RABIES CONTROL STRATEGY

Rabies remains a critical public health threat in Southeast Asia. However, in the spirit of World Rabies Day, countries throughout the region are working together to make canine rabies history.

On May 11-13th 2009, a workshop on the development of advocacy strategies and policy for the elimination of canine rabies in Southeast Asia was convened by ASEAN+3 countries in Hanoi, Vietnam. The workshop was well attended with representatives from China, Cambodia, Lao PDR, Myanmar, Philippines, Thailand, and Vietnam. The meeting organizers also invited representatives from WHO, WSPA, and the Alliance for Rabies Control to provide assistance in developing advocacy strategies in these countries. Prior to this meeting ASEAN organized a country tour for participants to see firsthand the work being done by their neighbors. This workshop was a follow up for each country to share their perspective on rabies control efforts in each country over the past several years and learn from the successes and pitfalls experienced by others.

Over the course of the workshop, representatives reviewed strengths and weaknesses in their countries which could be leveraged or improved in order to control and eliminate canine rabies. In general, the workshop found regional strengths in the movement by all countries towards making rabies a notifiable disease and creation of national legislation for canine rabies control; the availability of human and veterinary medical infrastructure including voluntary health personnel in some local regions; and the availability of some financial resources to support human rabies post-exposure prophylaxis. However, more work is needed. Staffing and financial resources for enforcing existing policies, diagnostics, research, and training are lacking and limited access to human and animal rabies vaccines in some regions must be overcome. Before the meeting was



global fight to eliminate rabies!

concluded representatives began working on solutions to these problems and developing independent country plans for the elimination of canine rabies.

The workshop represented a start of a renewed effort to develop and implement rabies advocacy and policy plans. A framework to develop a national advocacy plan was provided at the conclusion of the meeting for input from participants. Country representatives were then tasked with providing updates on continued efforts and a draft country plan for review at a follow-up meeting to be held during the Rabies in Asia meeting this September.

Reported by Jesse Blanton, Rabies Section of the Centers for Disease Control and Prevention, Atlanta, Georgia who attended the meeting on behalf of the Alliance.

### THE ALLIANCE SIGNS PARTNERSHIP WITH PAN AMERICAN HEALTH ORGANIZATION

On June 24, 2008, the Alliance signed a formal Partnership agreement with PAHO. The Partnership between the Alliance and PAHO will enable the two organizations to work more closely together in efforts to prevent human and animal rabies across the world. The dramatic reduction of canine rabies throughout Latin America over the last two decades, coordinated by PAHO, provides an excellent model which canine rabies endemic countries could use to successfully reduce their own burden of rabies. The Alliance is proud to join with PAHO in the



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Dr. Mirta Roses Periago, Director of PAHO and Dr. Deborah Briggs, Director of the Alliance at the historic signing of the Memorandum of Understanding in the PAHO Headquarters in Washington D.C.

# **USNS COMFORT**

In partnership with the U.S. Navy, the Alliance for Rabies Control has joined the United States Naval Ship (USNS) Comfort in providing humanitarian aid throughout Central America. Dr. Robin Hughes, a veterinarian with an expertise in public health, is representing the Alliance on the mission as it travels throughout several countries in Latin America.

Since the 1st April, the USNS Comfort has been carrying out operation Continuing Promise, a 4 month deployment sailing to Panama, Colombia, El Salvador, and Nicaragua. It is providing much needed information and resources on various zoonotic diseases including a special emphasis on rabies. During the mission, most patients are seen in an outpatient setting on land, but after patients have been screened, they can be brought onboard for surgical procedures. The ship has a capacity of 1,000 hospital beds and can conduct most surgical procedures apart from open heart surgery, joint replacement, and transplant surgery.

The crew is comprised of US and foreign military and civilian personnel, including members of six charitable organizations such as Project Hope, Operation Smile, the Rotarians, the Church of the Latter Day Saints and the Alliance for Rabies Control.

Much of the zoonotic disease work has focused on deworming and vaccinating livestock. Working in areas where rabies vaccination levels are very low, the rabies team has been vaccinating large and small animals against rabies, and distributing spanish-language rabies information leaflets which have been well received and are much appreciated by local residents.



This effort would not be possible without the help of numerous partners and the Alliance would like to thank the American Veterinary Medical Association, Ministry of Health of Chile and the One Health Initiative for their support.

The Alliance's website has been updated frequently with news and photos from Dr. Hughes during the mission. See www.rabiescontrol.net/EN/Programs/ Projects-Overview/USNS\_Comfort.html

# EDUCATE AND VACCINATE – WORLD RABIES DAY IS SEPTEMBER 28

September 28th marks the third anniversary of the World Rabies Day Campaign. Event planning is underway and informal reports have begun arriving in from public and private organizations around the world. This year NGOs and some industry partners are taking it upon themselves to coordinate cross-continental awareness activities for their employees. Additionally,



WRD 2008 at Ahmadu Bello University in Zaria, Nigeria (photo Dr Asabe Dzikwi)

larger Regional and National events are becoming quite popular. Governments are seeking to develop and initiate rabies elimination plans. Ministries of Health and Education are working together to reach entire countries via coordinated mass media and other outreach efforts such as distributing educational material to schools. At the local level community partnering is taking place between humane associations, veterinary and medical colleges, practicing clinicians and industry partners. To help facilitate event coordination, the campaign team has been assembling new educational materials such as public service announcements and toolkits, collaborating with new outreach partners like the Philippine Canine Club and tying into social networking sites such as Facebook and Twitter. In 2008, WRD activities were reported from 85 countries. This year the WRD Team expects to exceed that number! Currently averaging 10,000 visits per month, the WRD web site is a clear indicator that there continues to be a real need for rabies education globally and an ever growing interest in WRD participation. The WRD campaign has truly become a platform for all of us to speak with one voice and tell the world that rabies is a

preventable disease and no one need die of this horrific disease anymore. The success of the WRD campaign is due entirely to the passionate volunteers, dedicated partners and tireless event coordinators around the world and we thank them for their continued efforts and support of this global initiative! To find out more about how you can get involved or to tell us about your WRD 2009 event, please contact Peter Costa (peter.costa@worldrabiesday.org) or visit the World Rabies Day website (www.worldrabiesday.org).

Contributed by Peter Costa of the World Rabies Day Team

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### **BREAKING THE BLOCKADE TO CHEAPER PEP IN INDIA**

Rabies is one of the most dreaded diseases leading to painful death in human beings, and causes around 20,000 deaths in India alone each year. The discovery of nerve tissue vaccine (NTV) was a great savior for the animal bite victims. However, due to rare adverse reactions, in 2004 the use of NTV, previously given free, was stopped by the supreme court of India. Sadly, in its absence, millions of poor people were left at risk of dying for want of an affordable vaccine. In my own clinical career I have seen too many patients die of rabies due to their lack of financial ability to purchase vaccines, one just two months ago in Himachal Pradesh.

With the banning the NTV, there was an acute shortage of vaccine, worsened by the fact that the intradermal vaccination route was not approved in India. The cost of one complete course of PEP using cell culture rabies vaccine, is around 2220 rupees (45 US\$) when given through an intramuscular route. This is more than the monthly salary of most poor people living in India. The cost for PEP drops to 370 rupees (8 US\$) when vaccine is given intradermally, five times less costly.

In 1992, the WHO recommended the use of cost effective intradermal regimen (IDRV), first introduced in Thailand, and subsequently in the Philippines and in Sri Lanka by 1996. In India many NGOs demanded the endorsement of IDRV, but it took several years to overcome political stumbling blocks while thousands continued to die a painful death. Ten years after the Intradermal route of antirabies vaccine was approved by WHO, the Indian government ordered Indian trials to be conducted in 2003-2006. These clinical trials proved the life saving value of IDRV beyond doubt. Additionally, many physicians began to join the lobby to increase the use of IDRV.



Dr. M.N.Siddiqui along with the government of U.P. started the first antirabies intradermal clinic in the country on May 19th, 2006. Since that time, there has been no looking back for India. Currently, nine states have begun to use IDRV (U.P., Orrissa, A.P., Karnataka, W.B., H.P., Kerala, T.N. and Uttrakhand) along with two clinics in other states and many more are scheduled to begin IDRV soon. More than a million doses of rabies vaccine have been given intradermally with no reported failures and millions of rupees of poor patients earnings have been saved.

In Himachal, in over eight months of the IDRV program, we have vaccinated 2020 animal bite victims and have saved more than 3 Million rupees (60,000 US\$) for poor patients and we look forward to saving more when IDRV becomes routine in future. Also we are helping our neighboring states to start IDRV as early as possible.

Contributed by Dr. Omesh Kumar Bharti M.B.B.S., D.H.M., M.A.E, Directorate of Health Services, Himachal Pradesh, Shimla, India. A Powerpoint presentation on IDRV by Dr. Bharti is available online at http://idcoa.cloverpad.org/Content/Documents/Document.ashx?DocId=3783

# USING ONRAB® ORAL RABIES VACCINE BAITS IN ONTARIO, CANADA.

More than 56,000 cases of animal rabies have been reported in Ontario, Canada, since the 1950s. Historically, the primary vectors of rabies in Ontario have been red foxes and striped skunks, which accounted for about 66% of the total cases. In addition, raccoons became an important vector when the raccoon variant of rabies was reported in Ontario during 1999.



Having 3 primary vectors of terrestrial rabies in one geographic location presents significant challenges when attempting to control the disease. For example, each species has specific food items, differing habits and behaviors. More importantly, until recently, a single oral vaccine was not effective in immunizing all three species against rabies. Given this challenge, the Ontario Ministry of Natural Resources (OMNR) and partner organizations embarked on a research program during the early 1990s to develop a vaccine-bait that would effectively immunize raccoons, skunks and foxes. Research progressed from the laboratory to the field when approval was given in 2006 to conduct a field trial in Ontario using the newly developed vaccine-bait called ONRAB<sup>®</sup>.

To date, field experiments have focussed on maximizing vaccine-bait uptake and sero-conversion by the 3 species. This was accomplished by varying bait density and aircraft flight-line spacing as well as the time of year when baits were distributed. Results achieved in the field have been impressive for raccoons with bait acceptance ranging between 62% and 87% depending on bait density. Sero-conversion in those animals ranged between 66% and 84%. Current research is focussing on maximizing bait acceptance and sero-conversion in skunks and red foxes both in the field, and in the laboratory. Given the progress that OMNR has made in the field of vaccine development and wildlife rabies control, it is anticipated that wildlife rabies (other than in bats) will be eliminated from Ontario in the very near future. The challenge will be to respond to new cases that appear as the disease is still present in neighbouring provinces and states.

This article was prepared by Dr. Rick Rosatte, Senior Research Scientist, with the Ontario Ministry of Natural Resources, Wildlife Research & Development Section in Peterborough, Ontario, Canada. For additional information on this research please refer to the publication R. Rosatte et al. 2009. Aerial distribution of ONRAB® baits as a tactic to control rabies in raccoons and striped skunks in Ontario, Canada. Journal of Wildlife Diseases v45, p363-374.

### HUMAN RABIES FROM VAMPIRE BATS: EMERGING IN LATIN AMERICA?

Fatal cases of human rabies transmitted by hematophagous (vampire) bats reached new heights in Latin America in 2004 (46 cases) and 2005 (55 cases). In 2005, 42 cases occurred in Brazil (41 in the Amazon region), 7 in Peru, 3 in remote communities of Colombia, 2 in Ecuador, and 1 in Bolivia. Vampire bats are only found in Latin America and of the three recognized species, only the common vampire (*Desmodus rotundus*) feeds on mammals and thus could transmit rabies to humans.

In 2004, for the first time in the history of the Regional Rabies Elimination Program coordinated by the Pan American Health Organization (PAHO), the number of human cases of rabies transmitted by wildlife (in most cases the vampire bat) exceeded those transmitted by dogs. Latin American countries have been making major efforts to control canine-transmitted human rabies since the 1980s and cases have declined by nearly 90%. In 2005, 13 cases of canine-transmitted human rabies in Latin America were reported, compared with 60 cases of bat-transmitted human rabies (55 from hematophagous bats). Recent data indicate that cases of human rabies transmitted by dogs in Latin America remained at 16 for both 2007 and 2008, compared with 6 cases from bats (4 from vampire bats) in 2007, and 27 from bats (24 from vampires including one outbreak of 23 cases in Peru) in 2008 (SIRVERA/PAHO, 2009).

A few isolated cases of bat-transmitted human rabies are also reported in North America, and bats continue to be a primary reservoir for rabies virus worldwide. Reviewing all the information available (PAHO database and the literature) revealed 637 reported human cases of bat-transmitted rabies in Latin America up until the end of 2006. A study of these outbreaks has made it possible to identify certain recurring factors: a) the outbreaks all occurred in small, generally remote, populations; b) all of the locations for which information is available had experienced a change in human activity such as a surge in gold mining, deforestation, or withdrawal of domestic animals; c) all the communities had poor living conditions, including precarious housing; d) none of the communities (for which information is available) had access to health services offering rabies prophylactic treatment, nor did inhabitants know that bat bites could transmit rabies; and e) the practice of raising large domestic livestock was limited or nonexistent at the time of the outbreaks; in two cases the outbreaks coincided with a recent end to livestock production. More specific



Housing in the outbreak region in the Amazon.

the outbreaks coincided with a recent end to livestock production. More specific investigation of outbreaks could lead to tailormade disease control measures to reduce the number of human rabies deaths.

From the early 1990s, a number of national and international recommendations have been formulated by rabies experts. Most of these recommendations underscore the need for pre-exposure prophylactic treatment among high-risk populations and post- exposure treatment for those bitten by bats. Recommended measures also include bat population control, greater rabies awareness in at-risk populations, and epidemiological surveillance.

Prevention and control of bat-transmitted rabies should emphasize an intersectoral approach involving not only health and agricultural sectors, but also the areas of environment, education, housing, and infrastructure, and should include community participation. The prevention of diseases transmitted by wildlife is feasible, particularly when there is an adequate monitoring of environmental risks such as clearing land and prospecting for gold, information on the presence of rabies virus in animals, and knowledge of the reality of bat bites in humans. This kind of monitoring can and should be reinforced by permanent information exchange between health and agricultural sectors in order to help anticipate and prevent outbreaks. Support from decision-makers in all sectors involved, along with community participation, are critical.

Contributed by Dr. Christina Schneider of PAHO, based on Schneider MC, et al. Rabies transmitted by vampire bats to humans: an emerging zoonotic disease in Latin America? Pan Am J Public Health (2009) v25, p260-9, available on the Alliance's website under About Rabies / Scientific Literature. Current data are available from SIRVERA/PANAFTOSA/PAHO at: www.panaftosa.org.br/Default.aspx

An Expert Consultation on Rabies transmitted by bats in the Amazon Region is available at: www.paho.org/common/Display.asp?Lang=E&RecID=10113

# **OIE CONFIRMS ITS COMMITMENT TO WRD**

In a recent article in their bulletin, the OIE (World Association for Animal Health) confirmed its commitment to the global fight against rabies and its support for the 3rd World Rabies Day taking place on 28 September 2009. OIE Members are invited to actively participate in the 'World Rabies Day' events and to liaise with their OIE regional or subregional representation for further information and for planning of national and regional activities.

#### **Conference Announcements**

Rabies in Asia Conference 2009 September 9th - 11th 2009, Hanoi, Vietnam details at www.rabiesinasia.org/riacon2009/notice.html Rabies in the Americas (RITA) XX October 19th - 23rd, 2009, Quebec, Canada details at www.rita2009.org

The editor of the Alliance newsletter is Louise Taylor. If you have news items or information of interest to those working to defeat rabies, please contact her at louise.taylor@rabiescontrol.net. For further information on the Alliance's work see www.rabiescontrol.net.