



RABID BYTES

The Newsletter from the Alliance for Rabies Control
Issue 1, November 2006



Editorial

It's been an exciting initial few months for the Alliance for Rabies Control Trust, and after our first few tentative steps we are happy to report that we are up and running and have been delighted by the level of global interest and support that we continue to receive. Most people have heard of rabies and have a horror of the disease, but almost unimaginable to most of us is the suffering endured by victims and their families who experience the disease first hand. A reaction we continually

encounter, as we approach potential sponsors, is one of surprise at the lack of global support for rabies prevention especially in Africa and Asia where rabies prevention programs suffer from widespread neglect, largely because the disease mostly affects neglected and impoverished communities.

The Alliance recognises the enormous challenges that all of us face as we join forces to tackle rabies, not only in the vast and complex continents of Asia and Africa, but also in the American continent where solutions to control canine rabies are well established. Nevertheless, canine rabies has been successfully eliminated from North America and we are moving toward the elimination of dog rabies in many Latin American countries. Together, we strongly believe that we can make progress by increasing global awareness and by generating a sense of outrage that more than a hundred people continue to die from rabies every day, when every death it entirely preventable.

We are sure that all of you will agree that it is time that all of us join forces and work together on a global initiative to eliminate the threat of rabies to both humans and animals. Therefore, the Alliance for Rabies Control invites each of you to join with us in this effort. Please visit our website (www.rabiescontrol.org) and agree to be a partner with us in this worthwhile endeavour. Together we will make a difference!

Finally, it is the goal of the Alliance to send a quarterly newsletter concerning rabies issues to all of our friends and partners. Therefore, we invite you to send us all of your noteworthy rabies news items so that they can be included in the next issue of Rabid Bytes.

The board of the Alliance for Rabies Control;
Debbie Briggs, Ray Butcher, Sarah Cleaveland, Eric Fèvre, Julie Gallagher, Karen Laurenson, Federico Spinola

Alexander McCall Smith

We are delighted to announce that Alexander McCall Smith has recently agreed to become a Patron of the Alliance for Rabies Control. Prof McCall Smith lives in Edinburgh, and has written more than 60 academic, children's and fiction books, including the well known 'No. 1 Ladies' Detective Agency' series set in Botswana. In 2004 he won the British Book Awards Author of the Year.

He was born in Zimbabwe, educated in Scotland, and was a professor of medical Law at Edinburgh University until 2005. He has worked extensively in Botswana, where he helped set up a new law school, and has also been a member of the Human Genetics Commission of the UK, and the International Bioethics Commission of UNESCO. His website is:

www.randomhouse.com/features/mccallsmith/



Photo © Graham Clark

Television Documentary "THE GIRL WHO SURVIVED RABIES"

On October 31st, a documentary on human rabies, centred on the history of the Wisconsin teenager who survived rabies, was presented on Channel 5 in the United Kingdom. The film illustrated a realistic portrait of the ongoing tragedy of human rabies in developing countries and offered hope for a future cure of the most deadly disease known to man. Dr's Rodney Willoughby (Children's Hospital, Milwaukee USA), Charles Rupprecht (Centers for Disease Control and Prevention, Atlanta Georgia USA), Stephen Scholand (Rabies Free World, Philadelphia Pennsylvania USA), Thiravat Hemachuda (QSMI, Bangkok Thailand) and Alan Jackson (Kingston General Hospital, Kingston Ontario Canada) all contributed to the documentary.

The film presented real human cases of rabies in the Philippines and emphasized the ongoing tragedy of human rabies in other developing countries where unvaccinated community dogs continue to pose a threat to human life. Hopefully, this film will increase the global awareness of rabies and the need to take immediate action to eliminate this disease.

Protecting Ethiopian wolves from rabies

Endangered wildlife populations such as the Ethiopian Wolf and African wild dogs are threatened to the point of extinction by rabies. A recent research paper in the journal *Nature*, has reported that targeted vaccination can protect Ethiopian wolves (one of the rarest carnivores on the planet) from a rabies epidemic. A targeted approach to vaccination means that relatively few wolves need to be vaccinated to prevent the largest rabies outbreaks that could result in extinction.

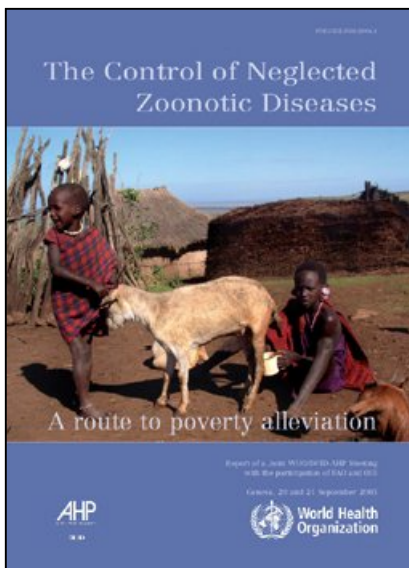
The study highlights how a preventative strategy of monitoring and rapid response can be used for endangered species. This is an excellent example of how an integrated approach between theoretical ecologists, wildlife biologists and rabies expertise can really make a difference to conservation issues on the ground. Several of the authors of the paper are members of the Alliance for Rabies control, and the reference is *Nature*, 2006, volume 443, pages 692-695.



Rabies and ARC highlighted in a report on neglected zoonoses

A report entitled "The Control of Neglected Zoonotic Diseases: A route to poverty alleviation." was jointly published in July 2006 by the World Health Organization and the UK Department for International Development Animal Health programme. The report focused on seven zoonoses (diseases that can be transmitted to humans from animals); anthrax, bovine tuberculosis, brucellosis, cysticercosis, cystic echinococcus, rabies and zoonotic trypanosomiasis and involved researchers from both veterinary and human health backgrounds, alongside individuals from non-governmental organizations, donors, representatives of UN agencies and those involved in zoonosis control in Africa, Asia and South America.

The human health burden of zoonoses is frequently overshadowed by the "big 3" killers of HIV, TB and malaria, but their impact should not be ignored the report states. The control of these diseases is particularly complex due to reservoirs of infection in animals, sometime of several species. All too often the management of these diseases falls between the specific responsibilities of government departments such as Health Ministries dealing with human health problems and those perceived to be primarily the responsibility of the Ministries of Agriculture, i.e. veterinary medicine. The under-reporting of rabies in Africa and Asia is discussed in one section of the report, and the Alliance for Rabies Control is highlighted as an organization playing an important role in raising the profile of these diseases. The full report is available at: www.who.int/entity/zoonoses/Report_Sept06.pdf



World Health Organisation responds to China's rabies control strategy

In August this year, at least 50,000 dogs were beaten to death by authorities in China as part of an attempt to stop an ongoing rabies epidemic. Understandably, animal protection charities were alarmed by the often inhumane way in which the dogs were treated, and the US Humane Society offered China \$100,000 to vaccinate dogs against rabies if China promised to immediately stop the mass slaughter of dogs. The Ministry of Health in China reported 1,874 deaths from human rabies from January to August this year, a 29.2% increase over the same period last year, attributing the rise to a rapid increase in unvaccinated pet dogs, especially in Beijing.

This report prompted the World Health Organization to release a statement, entitled "Controlling rabies in dogs: what to do - what to avoid doing?". This reiterates the recommendations of the Expert Consultation on Rabies held in Geneva, October 2004, advising that there is no evidence that removal of dogs alone has ever had a significant impact on dog population densities or the spread of rabies, and that there is evidence that mass culling can actually be detrimental to rabies control efforts. The WHO Expert Consultation concluded that increased surveillance and strategic vaccination are the keys to successful rabies control programmes. The text of the article is available at:

www.who.int/rabies/animal/dogs/en/index.html

UPDATED ACIP Recommendations for Rabies Prevention from CDC

In October, 2006, the Advisory Committee on Immunization Practices convened to review the Recommendations for Human Rabies Prevention in the United States. The last publication in 1999 by ACIP is available at: (www.cdc.gov/mmwr/preview/mmwrhtml/00056176.htm). The agenda for this meeting included an overview of rabies, a review of the current biologicals, cost-effectiveness of post-exposure prophylaxis, and recommendations for both post- and pre-exposure prophylaxis. The draft document has been approved and the updated ACIP Recommendations for the Prevention of Rabies are tentatively scheduled to be available in the spring of 2007.

Northern European Conference on Travel Medicine

The Alliance for Rabies Control provided a booth displaying information about rabies prevention at the Northern European Conference on Travel Medicine 7-10 June 2006. The conference brought together members of many Travel Medicine Societies and Organizations of Northern Europe as well as delegates from the International Society of Travel Medicine (ISTM). The Conference covered a broad range of the most timely and topical travel health issues. A presentation was made by Dr Francois-Xavier Meslin, from the World Health Organization entitled "Rabies Vaccination for Travellers". Dr Meslin's presentation was attended by the Princess Royal, who mentioned rabies in her speech to the delegates at the meeting and met with Dr. Meslin following his presentation. Many of the delegates at the meeting visited the booth sponsored by the Alliance and requested further information on rabies pathogenesis and prevention.



Photo © Paul Dodds

Visit of the Princess Royal to Edinburgh

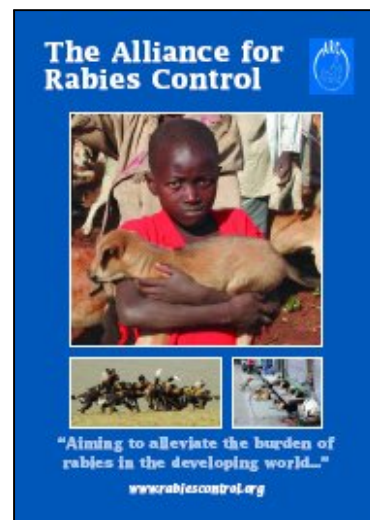
During her visit to Edinburgh in June 2006, the Princess Royal officiated at the opening presentation of the new teaching facility of the University of Edinburgh's Royal (Dick) School of Veterinary Studies. As part of the formalities, the Princess Royal met with Dr. Sarah Cleaveland who presented a poster on her rabies research in Tanzania.

Intervet supports publication of the Alliance leaflet

The Alliance would like to thank Intervet for funding the printing costs of the Alliance leaflet. The leaflet was distributed at the Northern European Conference on Travel Medicine (Edinburgh, June 2006) and at the Rabies in the Americas conference (Brasilia, October 2006). There have been additional requests from several travel clinics for copies that could be used for distribution. The leaflet can be downloaded from the ARC website.

Updates to the website

We would like to thank Niall Macpherson and Margot Frenot for their expertise in the establishment of the Alliance website (www.rabiescontrol.org), which is frequently updated with news and events relevant to the rabies community. Two summary documents and a series of case histories have recently been added. The case histories, a few of which are printed within, are a powerful reminder of the human suffering that the Alliance is aiming to relieve. We sincerely invite our partners to submit additional case histories in order to increase awareness as to the ongoing tragedy of rabies.



Upcoming meetings

Towards the Elimination of Rabies in Eurasia. This is a joint OIE/WHO/EU meeting to be held in Paris 27-30th May 2007. For further information see: <http://www.oie.int/eng/rabies2007/home.htm>

The Rabies in Asia (RIA) Foundation Conference will be held March 3rd-4th, 2007 at the National Institute of Mental Health and Neurosciences (NIMHANS) Bangalore, India. Further details are available at www.rabiesinasia.org.

Report from the XVII Rabies in the Americas Meeting



Over 500 participants registered for the 2006 RITA meeting held in the beautiful city of Brasilia, Brazil on October 15 – 20, 2006. The five day event was a huge success with papers being presented on everything related to rabies including basic research, molecular epidemiology, diagnosis, human and animal pathogenesis, vaccines and biologicals, as well as potential new medical treatment for human rabies patients. As usual, the RITA presented many opportunities to meet and greet old and new friends as well as time to discuss collaborative efforts with colleagues on ongoing and future research initiatives. Two fun-filled fund raising events were a great success again this year. The Run for Rabies event saw many hard core and would-be runners and walkers participate in this great event. The auction to raise funds for the Latin American Investigator Award was also filled with good humor and raised a significant amount of money for a worthy cause.

If you are not a regular participant to this international meeting, we urge you to consider including it in your next year's agenda! The 2007 RITA meeting will be hosted by our colleagues from Mexico and we look forward to hearing more information as to the exact location and date.

Case Histories of Rabies

Indiana, USA

A 10-year-old girl who was diagnosed with Indiana's first confirmed case of rabies in nearly half a century died Thursday, a hospital spokeswoman said. Shannon Carroll had been bitten by a rabid bat in June and had been hospitalized since early October. More than 30 of the girl's relatives, friends and classmates were offered injections to prevent the spread of the disease. Some parents whose children attend the girl's school in Bourbon, 25 miles south of South Bend, worried about possible exposure since rabies can stay dormant for more than a year. State records show Indiana's last human rabies case was in 1959. Extracted from:

http://seattlepi.nwsourc.com/health/1500AP_Rabies_Death.html

As part of their research based in Tanzania, Magai Kaare and Katie Hampson of Edinburgh University are collecting case histories from people bitten by suspected rabid dogs. We have reprinted two here to serve as a reminder of the suffering that ARC is trying to alleviate.

Ngorongoro, Tanzania

Lemeni's 5 year old granddaughter was herding cattle near the mountain top in late November 2003 when she was bitten on the ear and scratched on the head by an unknown dog. She went to the dispensary in Sale and then to the dispensary in Malambo where she was referred to the district hospital in Wasso, some distance away. However, the wound had healed by then, so she didn't go. Two and a half to three weeks after the bite she started to show symptoms and so was taken directly to Wasso. This was more than 6 hours by car, and it is unusual for more than one car to pass through the village in a day. Unfortunately, by this time it was too late. She died in late December 2003.

Mwanza, Tanzania

EM, a 10year old female primary school student from Kijima village in the Mwanza region, lives in a mud and grass thatched house. The household has a total of 8 people and spends US\$ 18.5 per month on expenses. EM was bitten by an unknown suspected rabid dog on the head and ribs on the morning of 03/02/03, while on her way to school. The bite wound was not washed at the time, and the girl reported to the district hospital 5 days later. The delay was because she had to wait until her father had sold one of his three cows to get money for post exposure treatment, accommodation and the bus fare. The money raised from selling the cow was not enough to meet all the costs, so she received only 2 injections of anti-rabies vaccine. She could not attend school for a week, but at the time of the interview she was doing well and attending school as usual.



Become a PARTNER of ARC

Our website is starting to spread the message. Already we have people requesting our newsletter from several European countries, China, Nigeria and Ethiopia. Join us in a global effort to eliminate the threat of rabies. Together we can make a difference! Sign up at www.rabiescontrol.org.

Become a supporter

Give a financial gift that can help save a life. Find out how you can donate to ARC at: (www.rabiescontrol.org)