



RABID BYTES

The newsletter of The Global Alliance for Rabies Control

WRD 2013.....	2
Bohol Program Recognized.....	3
GARC Addresses WHA	3-4
Gates Foundation & WHO Establish Vaccine Bank for South Eastern Africa	4-5
Rabies Data Discrepancies	5
Fighting Rabies in N'Djamena, Chad	6
Canine Rabies Imported to Spain.....	7
Rabies Diagnostic Course, N'Djamena ...	7-8
Rabies Found in Central Alaska	8
Rabies Education Tools	9
WHO Expert Consultation Report.....	10
Upcoming Conferences	10

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EDITORIAL

At the end of May, representatives of the 194 World Health Organisation (WHO) Member States met at the Palais des Nations of the United Nations in Geneva, Switzerland. More than 2000 delegates arrived from all corners of the world to debate and decide on the ongoing and future working programme of the World Health Organisation (WHO). There was hardly any leisure time for the participants of the 66th World Health Assembly (WHA), because the six day agenda was packed and discussions and separate meetings sometimes went on until late. The WHA discussed many important global health issues, including monitoring progress towards the health-related Millennium Development Goals by the year 2015, solutions to overcome the challenges of the last stages of global polio eradication, the importance of intersectoral collaboration, dedicated programmes helping countries to improve access of the entire population to health care and the acknowledgement that a healthy population is absolutely key to sustainable economic growth of all countries, whether rich or poor.

Alongside these critical topics, the 66th WHA was a historic event for rabies in many ways: Rabies is now officially listed by the WHO as a neglected tropical disease (NTD). On Saturday 27 May 2013, the WHO Member States adopted the 'Resolution on the prevention, control, elimination and eradication of neglected tropical diseases'. Rabies sadly fits the criteria of a neglected tropical disease, being a disease of poor and vulnerable people whose deaths are rarely reported. It primarily affects remote rural communities where measures for rabies control and prevention have never been implemented. Severe under-reporting has contributed to the limited mobilisation of resources from the national and international community to better tackle control and elimination of dog-mediated rabies.

So why is the NTD classification of rabies considered to be a historical breakthrough? What does it imply for the people and animals suffering from continued rabies threats? 1) This is only the third time in the history of WHO that a resolution mentions rabies at all (namely in 1950, 2012, 2013). 2) The adopted resolution represents an unprecedented political commitment from the international community, a call to all countries to put an end to the deadly neglect of NTDs, such as rabies. 3) The resolution urges all countries to particularly prioritize NTD prevention, control, elimination and eradication programmes in their national or regional agendas and calls on international partners to provide sufficient and predictable funding for the fight against those diseases.

It has taken the rabies community several years to attain such leverage for rabies matters at a global level. Finally it is acknowledged that rabies is a deadly, yet fully preventable problem for too many communities of this world and that something needs to be done about it - with high priority. In conclusion this international commitment has great potential to support the updating and further elaboration of rabies control guidelines and strategies to support countries in starting, progressing and maintaining efforts in rabies control, elimination and prevention. So, now more than ever we should be ready to build on this renewed momentum, hoping it will flourish and blossom into a promising future without the major threat of rabies. *Dr. Lea Knopf, Institutional Relations & Networks, GARC*



NEWS FROM GARC AND WRD

World Rabies Day – It's time to share!

Have you started planning your event for World Rabies Day?

This year's theme is **Rabies: understand it to defeat it**. It celebrates all the educators and communicators whose work is essential in helping more people protect themselves from the disease.

Our website, www.rabiesalliance.org, has new ways for you to share your events and celebrate successes with others in the global rabies prevention community.



ORGANIZE

- Register an event and invite others to come along <http://rabiesalliance.org/world-rabies-day/report-event/>
- Make your mark – when you register your event it will show up on the events map <http://rabiesalliance.org/world-rabies-day/make-your-mark/> showing that you really are part of something global
- Brand your materials with the World Rabies Day logo (if you can't find one in your preferred language, contact us and we'll create one for you) <http://rabiesalliance.org/world-rabies-day/logos/>
- Encourage your local and national media to cover your event with our modifiable press releases, radio public service announcements, and newsletter articles <http://rabiesalliance.org/world-rabies-day/publicizing-your-event/>
- Use pictures for articles from our photo gallery (free of charge) <http://rabiesalliance.org/media/photo-gallery>
- Use our extensive set of resources to support your event. There are posters, factsheets, videos and teaching materials, many of them available in various languages - and if you'd like a translated version of something, we're happy to help where possible <http://rabiesalliance.org/resources/>
- Remember every effort, however small, is massively important – World Rabies Day is a global movement because people like you care enough to do something.

TAKE PART

- Find an event near you and get involved <http://rabiesalliance.org/world-rabies-day/find-an-event/>

ANSWER

- If you have questions about rabies, check the improved and expanded 'Rabies' section on the website. This comprehensive guide to rabies has been checked and approved by specialists and is there to help you be sure you've got facts and not hearsay. <http://rabiesalliance.org/rabies/what-is-rabies-and-frequently-asked-questions/>

SHARE

- Share your World Rabies Day experiences and photos with the world <http://rabiesalliance.org/world-rabies-day/find-an-event/>
- Talk to us and others via facebook <https://www.facebook.com/GlobalAllianceforRabiesControl>
- and twitter @RabiesControl – If when tweeting about rabies, you use the hashtag #RabiesIsPreventable, it will help other people to find your tweets.
- Spread awareness about World Rabies Day by cross-posting on different platforms too.

Finally, if you have any queries that aren't answered on the website, please email us at info@rabiesalliance.org. World Rabies Day is about all of us, across the world, working to end rabies – let's take this opportunity to help even more people understand rabies to defeat it!

Bohol wins again



The Bohol Rabies Elimination Program, which proved that rabies can be eliminated at its source and that children's lives can be saved, has been recognised for excellence again.

Last year, the project was awarded the prestigious Galing Pook prize in the Philippines. Last week, the project was awarded The Charity Award 2013 in the category of Healthcare and Medical Research. Chief Executive, Deborah Briggs and Media Coordinator, Liz Davidson were in London to attend the dinner and award ceremony.

When asked why she had set up the charity, Debbie answered "Most rabies victims are children and I've seen what rabies does to a family. We do this to save the children."

The nominees are judged on ten hallmarks of excellence: leadership, people development, planning, innovation, enterprise, learning, impact measurement, effectiveness, accountability and sustainability.

The project in Bohol focused on empowering the community to take control of rabies prevention, improving education and awareness about the disease, and improving diagnosis and availability of vaccines. You can read more about our Bohol project [here](#).

Deborah was awarded the prize by Dr. Dawn Harper, a medical doctor and tv presenter, and Patrick Nash of the Leadership Trust. In response to winning, she said "To be nominated is an honour, to win is just ... wonderful. This is for all the people in Bohol who make rabies prevention on the island a reality."

The award helps to raise awareness of the disease and is another powerful endorsement of the GARC model of rabies prevention.

Our thanks to the judges, to the Charities Aid Foundation who sponsor the event, and to The Sunday Times and The Times who also support it.

You can read more about the Charity Awards [here](#).

GARC Addresses the WHA

On the 27 May 2013, the World Health Assembly adopted a resolution on all 17 neglected tropical diseases (NTD), including rabies. GARC was invited by the WHO to address a rabies-specific statement to WHO Member States Representatives from 32 countries and six nongovernmental organizations took part in the deliberations.

Dr Lea Knopf, policy director of the Global Alliance for Rabies Control, presented a statement highlighting the facts that rabies causes still about an estimated 60000 deaths annually, and causes economic losses of an estimated US\$6 billion per year worldwide. She went on to say that these impacts of rabies are entirely preventable, the tools for prevention and elimination are available and the need for enhanced intersectoral collaboration was widely recognized. She highlighted recent progress made by the Alliance in increasing awareness of and educational resources to combat rabies, and the Alliance's support of advocacy towards commitments to control rabies globally. The development of comprehensive regional strategies for rabies elimination for regions most affected are already underway, and GARC is currently working with WHO, OIE, FAO and others on a global strategy for canine-mediated human rabies elimination by 2030, with the overall goal of enhancing and sustaining national and international commitments. Dr Knopf finished by calling on WHO Member States to support rabies control initiatives and to enhance their own continued efforts in making deaths from human rabies history.

The resolution on all 17 NTDs (EB132.R7), urges Member States to:

- ensure country ownership of prevention, control, elimination and eradication programmes;
- expand and implement interventions and advocate for predictable, long-term international financing for activities related to control and capacity strengthening;

Continued on page 4...

...**GARC at WHA** *continued from page 3.*

- integrate control programmes into primary health-care services and existing programmes;
- ensure optimal programme management and implementation;
- achieve and maintain universal access to interventions and reach the targets of the [roadmap](#).

Dr Margaret Chan started her mandate as WHO Director-General in 2007, with a commitment to produce results on NTD control within five years. She called for an integrated approach to tackling these diseases as a new way of public–private partnership. Since then, increased support from Member States and a pragmatic working relationship with industry have produced unprecedented results, but huge challenges remain.

Photo: WHO/Pierre Albouy



Representatives of all countries who intervened supported the resolution, highlighting the challenges and ambitious targets set by WHO.

“This resolution reinforces the growing commitment of Member States in defeating neglected tropical diseases,” said Dr Lorenzo Savioli, Director of the Department of Control of Neglected Tropical Diseases. “As outlined in the WHO roadmap on neglected tropical diseases, we will continue to provide support, guidance, tools and resources to accelerate implementation of interventions.”

Summarized by Louise Taylor from the [WHO website](#) news item, and the GARC statement to the WHA.

NEWS FROM THE COMMUNITY

Gates Foundation and WHO establish dog rabies vaccine bank for South Eastern Africa

At the recent meeting of the Southern and Eastern African Rabies Group (SEARG) in Dar es Salaam, United Republic of Tanzania on 12-14 February 2013, Dr A. Pantelias of the Bill and Melinda Gates Foundation (BMGF) and Dr F.X. Meslin of WHO announced the establishment of a canine rabies vaccine bank in Kwa Zulu Natal (KZN), Republic of South Africa. This is an extension of the BMGF funded WHO project for human and dog rabies control in developing countries initiated in 2009 which in Africa supports rabies pilot projects in the province of Kwa Zulu Natal, and in the south-western part of Tanzania.



The BMGF/WHO projects are getting closer to entering the sustainability phase which among other objectives aim at catalyzing similar initiatives for the control and elimination of rabies in Africa and Asia within the next decade. Now the BMGF has agreed to provide 250,000 doses of vaccines over 3 years (starting in 2013) and cash to pay for syringes and shipping costs of vaccines to the recipient countries. These vaccines will support rabies control in the original project sites, and also joint activities at the international borders of Kwa Zulu Natal and southern and western Tanzania and to stimulate or strengthen small scale activities within South Eastern African countries. Through this donation these should acquire first-hand experience of mass immunization of dogs and knowledge of the size and accessibility to vaccination of their dog population. These are

Continued on page 5...

Rabies Data Discrepancies Hold Back Progress

Discrepancies in the reporting of rabies data by African nations may contribute to the lack of perception of rabies as a major health problem and a lack of prioritization of resources directed towards rabies elimination. This was the conclusion of a recent article by Louis Nel, Professor of Virology at the University of Pretoria in South Africa. He evaluated data reporting from several African nations and found that the number of rabies cases relayed to three different international organizations (Southern and Eastern African Rabies Group (SEARG), WHO and OIE) varied significantly for each country. African countries also inconsistently reported on the types of rabies deaths, with some countries providing only the number of human deaths, omitting the number of animal-related deaths entirely in their health statistics reports.



Poor disease surveillance and reporting practices were also evidenced by frequent omissions in data-reporting for periods of a year or longer by many African nations. In fact, incomplete case data reporting to WHO has also resulted in the recent closure of WHO's online 'RabNet' rabies reporting system. An additional analysis of 2010 data in the Nel paper found a huge variation in the ratio of human to animal rabies cases reported by African countries, inconsistencies indicative of poor surveillance practices.

Factors contributing to the inconsistent disease reporting include major differences in the data collection forms used by public health officials to report the data to health organizations, and a lack of coordination

between animal and human health sectors both within countries and internationally. Nel suggests a re-directed focus on the implementation of the One Health approach, so that rabies data collection can be synchronized and shared across multiple agencies. Additionally, coalescing the reporting of human and animal data to one epidemiologic agency could allow for the standardization and unification of disease-related data.

In spite of progress across the Americas and in European countries towards the elimination of rabies, African and Asian nations have not yet been able to effectively control rabies. In this regard, it would be illuminating to evaluate if better rabies control correlates with fewer data-reporting discrepancies across the range of developing to developed nations or even across the African countries for which data is presented here.

In summary, the paper highlights a significant problem with disease surveillance and reveals the flaws in the collection of epidemiologic information in resource-poor areas of Africa, resulting in an under-appreciation of the effect of rabies on African countries.

*Contributed by Laura Baker, a volunteer for GARC, based on the publication: Nel (2013) [Discrepancies in Data Reporting for Rabies, Africa](#). *Emerging Infectious Diseases* vol 19, No. 4, p529-533.*

...**vaccine bank** *continued from page 4.*

important steps towards acquiring base line data and experience for developing national programmes for human and dog rabies elimination.

Mr K. Leroux, Coordinator of the KZN rabies control project in Allerton Laboratories, Pietermaritzburg, has offered to provide cold storage space and together with Dr L. Nel, University of Pretoria and President of SEARG, the laboratories will manage the vaccine stocks in close collaboration with WHO. Vaccine donations will be accompanied by syringes and cold boxes and project staff in Kwa Zulu Natal and Tanzania could upon request provide technical assistance to the recipient countries. The first vaccine doses should be with Allerton Laboratories by the third quarter of 2013.

Major manufacturers of dog rabies vaccines present on the international market have been invited to contribute in cash and kind to the bank. One of them has already made an offer.

South Eastern African countries bordering the BMGF/WHO projects interested in benefiting from the bank should immediately contact Mr K.Leroux at k.leroux@kzndae.gov.za with copy at wamutitub@who.int and ramakrishnanv@who.int.

Important steps towards a rabies free N'Djamena

Chadian Veterinary and Health workers have shown true passion in fighting rabies by conducting the first dog vaccination campaign covering the whole capital, N'Djamena. During three months of work-filled weekends from October to December 2012, 18639 dogs, 1484 cats and 104 primates were vaccinated free of charge and the effort has paid off with a final coverage of 71% achieved. The rabies incidence has since dropped dramatically and the last detected case was reported on the 20th March 2013.

This success story came about thanks to the strengths of three Institutions joined in a real and mutual partnership. The Institut de Recherche en Elevage pour le Développement (IRED), the state veterinary laboratory, provided personnel (including young scientists) and logistics, the Centre de Support en Santé Internationale (CSSI), a local NGO, was in charge of medical supervision and the Swiss Tropical and Public Health Institute (Swiss TPH) contributed vaccines, material and research guidance.



*A boy proudly displays his dog and certificate after vaccination.
Photo: Dr. Christoph Haab*

Prior to the start of the intervention, an organisational meeting was held with municipality representatives, district and quarter chiefs and the vaccination teams were trained and immunized. The campaign was officially launched on World Rabies Day, 28th September 2012 with a short ceremony during a symposium sensitising people to the disease. Real hands on vaccination in town began one week later. Our ten teams, with 3 vaccinators each were vaccinating every Friday to Sunday. We applied a fixed post vaccination strategy and proceeded from district to district, west to east. All dogs vaccinated were marked with a blue plastic collar and paint mark on the trunk. The positions of the ten posts were discussed with district and quarter chiefs and always allocated to a block chief's house. These block chiefs kindly provided tables and chairs and in many cases even tea and meals.

Town authorities played a major role in sensitizing the population about the campaign. In addition we had put up posters, commissioned broadcasts on national and local radio stations and informed residents by loudspeaker one day before, and on the day of vaccination in each zone. On Monday to Tuesday, interviewers were sent out to households in the previously vaccinated zone to assess the proportion of owned vaccinated dogs. In addition to that, a team went out 4 times (morning and evening on two consecutive days) on a random transect to count roaming dogs with and without collars or paint marks to calculate the coverage at street level. These two surveys allowed us to model the proportion of ownerless dogs in the different zones, estimate the total dog population size and overall vaccination coverage.

This rabies campaign brought not only success in terms of control of the disease but it also awoke a sense of their power to bring about change in all the participants and considerably boosted the awareness of the Chadian people of the danger of rabies. We hope to keep this spirit of purpose, value and merit alive in the Chadian community not only for rabies control but also for other one health priorities.

We thank the Chadian Ministry for Pastoral Development and Animal Production, the Chadian Ministry for Public Health and the Municipality of N'Djamena with all the district, quarter and block chiefs for the administrative support, the UBS Optimus foundation for funding the Swiss TPH part of the project and the Merial company for providing us with vaccines, collars and certificates at a discounted price. Most importantly we are very grateful to all the owners, young and old, who brought their animals for vaccination and to all committee members, vaccinators, supervisors and interviewers who contributed their effort to this successful intervention!

Contributed by Monique Léchenne, a PhD student at the Swiss Tropical and Public Health Institute who played a central role in the vaccination campaign.

Canine Rabies imported into Spain

On 5th June this year, the first case of canine rabies was detected in mainland Spain since 1978. A dog bit four children and an adult in four different places around Toledo before it was killed by police, and laboratory analysis confirmed that it had rabies. The animal in question was Spanish, but had accompanied its owner on a four month visit to Morocco, and subsequently spent time in several different parts of Spain, including Barcelona. The owners of the dog changed their story about where they had been a number of times, which made it more difficult to trace everyone who may have come into contact with the dog. Media reports contain conflicting information, with one saying that the dog was vaccinated and another suggesting that the owner might have deliberately doctored veterinary records for the dog. The owners have been charged with negligence resulting in serious injury.

Spanish authorities set up a restricted area around Toledo, in which all dogs, cats, ferrets and other relevant companion animals underwent compulsory vaccination. All human and animal contacts are being followed up and offered PEP.

Spain has had rabies-free status since 1978, but guidelines for vaccination vary between autonomous regions. The economic crisis in Spain, which has left over 27% of the population unemployed, including over half the country's young people, has not been kind to companion animals, particularly dogs and cats.

Spain is the gateway to Europe from Africa, with regular ferry crossings to Morocco and the Spanish autonomous cities of Ceuta and Melilla on the North African Mainland. Last year, a Dutch couple managed to move a puppy they had picked up in Morocco through Spain to the Netherlands, where it developed rabies (see [here](#)). Controls to limit disease spread are in place, but clearly not always enforced.

During the recent incident in Toledo, the authorities reacted quickly, and the protocol was observed. However, because canine rabies cases have been unknown in Spain for so long, little is known about public knowledge of the disease. Some of the newspaper reports in the wake of the Toledo incidents did not, for example, mention that the disease, once contracted, is almost always fatal. One newspaper referred to it as "serious". Thankfully, protocols are in place, and have been quickly acted upon, but rabies has, in other respects, been forgotten, and there are clearly inadequacies in enforcement.



Mainland Spain and Morocco are less than 9 miles apart

Contributed by Jane Couatts of GARC who lives in rural Spain. It is based on news reports in El Pais from [June 13th](#) and [June 15th](#) and in the Telegraph on [June 11th](#), and some personal observations. The Ministry of Health report is available [here](#).

The 1975-8 outbreak in Spain, originating in Málaga, affected 126 animals (dogs and cats) and killed one person.

Rabies diagnostic course for Veterinary Health workers in N'Djamena

From 14th to 15th November 2012, 24 veterinary health workers and veterinarians participated at a rabies diagnostic course in N'Djamena, Chad hosted by the Institut de Recherche en Elevage pour le Développement (IREN) in collaboration with the Swiss Tropical and Public Health Institute (Swiss TPH) and the Global Alliance for Rabies Control (GARC). The course was part of a joint training week on zoonotic diseases together with the TB Unit at the IREN and kindly sponsored by the Wellcome Trust through the Afrique One consortium. Each veterinary delegation in the country was invited to send a representative to participate at this course and in addition some technicians from the IREN were chosen to attend. Our honourable guest expert was Prof. Charles Rupprecht, former Head of the rabies unit of the Centre for disease Control (CDC) in Atlanta and now head of research with GARC. The course was focused on the Direct Rapid Immunohistochemical Test (DRIT) established by Prof. Rupprecht. This test can be read with a normal light microscope and thus is more suitable in remote, low income areas than the Fluorescent Antibody Test (FAT), which requires a more technically and financially demanding Immunofluorescent Microscope.

Continued on page 8...

Rabies found in Central Alaska

Rabies was detected in two wolves for the first time in the Chandalar Lakes area near Fairbanks, Alaska late this spring. A trapper shot and killed the first wolf in late March, after the wolf had uncharacteristically approached the trapper in the wild. The second wolf was also slain by a trapper, who noticed that the wolf was acting strangely after it was captured. These wolves are the first cases of rabies in wildlife found in inland Alaska, and state wildlife workers are asking for tissue samples of recently killed wolves to verify if these are isolated incidents or signs of a larger outbreak of the disease.



Rabies has typically been confined to the northern and western coasts of Alaska, and the appearance of the disease in the interior of Alaska may have caught some sportsmen and pet owners off-guard. Rabies vaccine clinics are now being conducted in the vicinity, and hunters are being asked to refrain from feeding captured wildlife to their sled dogs and to take extra precautions when slaughtering or skinning animals. Hunters are also being asked to dispose of wildlife carcasses, instead of transporting them or leaving them behind, due to the ease of disease spread from the exposed tissues. While skinning the first wolf, the hunter had cut himself, and after consultation with his physician the carcass was tested for rabies, leading to the identification of rabies for the first time in the area. In response, the Alaska Department of Fish and Game is training people in rural communities to administer the rabies vaccine to domestic animals, and they are continuing surveillance programs in the interior wilderness areas.

State wildlife workers are not concerned that the new cases indicate a rise in rabies in the area. The interior wilderness lands of Alaska are vast, and according to State Veterinarian, Robert Gerlach, these newly discovered cases of rabies signify that the disease is present in an area where prior rabies testing had not yet been completed. The number of rabies cases varies every three to five years in Alaska in foxes, and the fluctuations in cases are correlated with the population sizes of the arctic hare, one of the primary food sources of the fox. Foxes are the most common carrier of the rabies virus in Alaska, but due to the magnitude of the wilderness areas, the prevalence of rabies has not been established. State officials are worried, however, that the movement of the red fox from other areas of Alaska due to climate change may spread the disease further.

Contributed by Laura Baker, a GARC volunteer, based on news stories in the Alaska Dispatch on [April 23rd](#) and [May 2nd](#), and [NECN.com](#)

...**diagnostic course** *continued from page 7.*

The first day of the training was dedicated to lessons in theory of rabies epidemiology and testing, presentation of the epidemiologic situation and diagnostic possibilities in Chad and ended with a vivid discussion round on the treated topics. Apart from Prof. Rupprecht speakers involved Prof. Idriss Alfaroukh, director General of the IRED, Prof. Jakob Zinsstag, representative of the Swiss TPH, Mr. Service Naissengar, Head of the IRED Rabies Unit, Mrs. Rolande Mindekem, Geographer and Chadian Health Expert and Ms. Monique Lechenne, PhD student.



Prof. Rupprecht and Chadian veterinary health workers during the training. Photo: M Léchenne

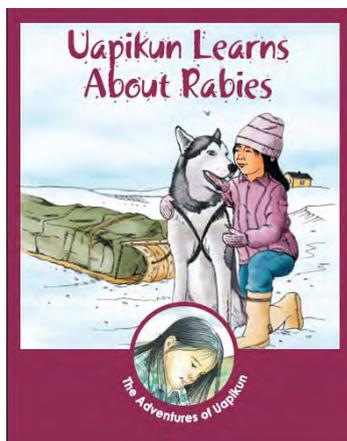
On the second day we proceeded to practical demonstration and hands on experience. Participants learned different methods to dissect a dog and gain the brain material for testing. Samples from negative experimental animals were then supplemented and mixed with negative and positive brain samples from the collection at the rabies laboratory. All participants had been vaccinated against rabies using the 3 doses Pre-exposure schedule, prior to the course, so they were protected whilst handling infected material and learning to recognize the virus under the microscope. Separated into four teams, each guided by an experienced supervisor the attendees had to perform the DRIT test on 10 samples and decide on a negative or positive result. The successful session was completed with a presentation of the actual results and a final discussion round and participants were certified to have attended and completed the course.

In future we want to equip certain veterinary offices in the provinces with DRIT test kits, to strengthen rabies surveillance across the whole country, not just the greater N'Djamena area. The rabies unit at the IRED will become the national reference laboratory and ensure diagnostic quality and central data collection.

Contributed by Monique Léchenne, a PhD student in Prof. Zinsstag's group at Swiss TPH

Rabies Education Tools - a collaborative process

Rabies education at its best is an integrated process, rather than a one-off production of materials. The most effective campaigns are collaborative, and incorporate all the people and institutions involved in rabies prevention in a locality. Most of all, everyone needs to know they have a stake in it, that their participation is necessary and valued. This is one of the secrets of sustainability.



A recently published book aimed at Innu school children in Labrador, Canada, is all these things. It was produced with the children and the community. Dr. Hugh Whitney, Chief Veterinary Officer for the province of Newfoundland and Labrador, has been involved in long-term outreach with remote communities in this Canadian province, where dogs are working animals and an important part of community life. The rabies outreach involves contributing to a series of books on "learning about life", and this edition features a little girl named Uapikun ("Flower"). A poster will also be developed based on the images in the book, and focusing on the key elements of rabies prevention and control. Dr. Whitney worked with the teachers, the children and the community, and learned how things were done there before working on the book with them.

Uapikun's family dogs are bitten by a fox with rabies, but they have been vaccinated, and are not in danger. The story is beautifully illustrated, and the messages in the images are as striking as those in the text. Images of dogs are positive ones, with the responsibility for their welfare placed firmly in the hands of family and community. "Will my dogs die?" asks Uapikun at one point. "Are the dogs hurt?"

Importantly, the One Health theme is present throughout. The nurse is a prominent character in the story, and we know her by name, Mary Pia. She is approachable and understanding, and takes time to explain *why* rabies prevention is important. It is Mary Pia who alerts the community by radio message, takes rabies prevention messages to the school, and takes charge of ensuring an unvaccinated dog is tested after it behaved strangely and died. A little boy who did not tell his parents the dog had bitten him is introduced to tell the other side of the story - what could happen with the wrong information - but again there is a happy ending, and he is vaccinated in time. The children know how to prevent rabies, and the consequences of not doing so, but nowhere in the story is the word "preventable" used. Prevention is an adult concept.



Dr. Whitney and the student who, when blind-folded, chose the picture to be used in the book

Real communities are mentioned by name, and the book will be published in two dialects of the local language (Innu-aimun), as well as English, with a version to follow in French. Stakeholders are personally present in the book, through their language, names, the local imagery and, most importantly, their involvement in its production. The rabies messages are now their messages.

This should tell us something about producing materials. Is a "one size fits all" really enough? The personalisation of "Uapikun" is effective, and involves much more than modifying the language and the images. Other regions of Canada have asked to use the book and Dr. Whitney is not simply going to translate it, he will begin a new collaborative process in the region concerned.

How can we duplicate this type of effort? In other parts of the world, authorities may not have the resources to do so. In some places, children may not even have access to schools, and teachers may not be used to "collaborating" with their pupils. We cannot change the infrastructure we work with, but we *can* change our approach into two-way learning processes rather than one-off delivery. Instead of simply providing information and answering questions, perhaps we now need to learn how to ask them. The visual, localised content, targeted language and interactive process of "Uapikun" ensure that this community will have a personal stake in rabies prevention for many years to come.

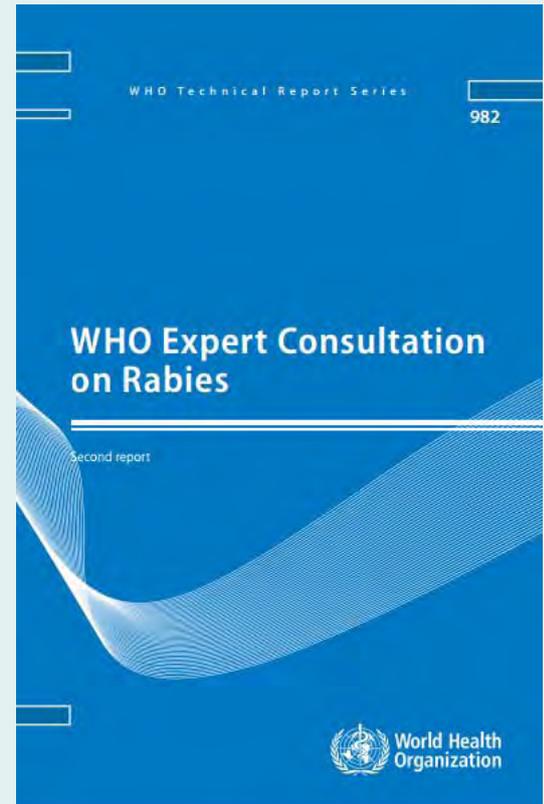
Contributed by Jane Coutts, a member of the World Rabies Day team at GARC. Dr. Whitney is happy to discuss the book with anyone who might like to adapt the concept. His contact is: hughwhitney@gov.nl.ca.

WHO Expert Consultation report

The technical report from the WHO Expert Consultation on Rabies which was held in Geneva in September 2012 is now available [online](#).

The report recognizes that poor surveillance, underreporting in many developing countries, frequent misdiagnosis of rabies, and an absence of coordination among all the sectors involved has contributed to the underestimation of rabies' impacts worldwide. However, it is clear that rabies disproportionately affects poor rural communities, and that most of the expenditure for postexposure prophylaxis is borne by those who can least afford it. As dog and human populations grow, the burden of human deaths from rabies and the economic costs will continue to escalate in the absence of concerted efforts and investment for control.

Since the first WHO Expert Consultation on Rabies in 2004, WHO and its network of collaborating centres on rabies, specialized national institutions, members of the WHO Expert Advisory Panel on Rabies and partners such as the Gates Foundation, the Global Alliance for Rabies Control and the Partnership for Rabies Prevention, have been advocating the feasibility of rabies elimination regionally and globally. This Consultation concluded that human dog-transmitted rabies is readily amenable to control, regional elimination in the medium term and even global elimination in the long term.



Upcoming Conferences

2nd International Congress on Pathogens at the Human-Animal Interface (ICOPHAI): One Health for Sustainable Development. This will be August 14 - 17, 2013 in Porto de Galinhas, Brazil. The website is www.icophai2013.org
The World Veterinary Association's 31st World Veterinary Congress will be held 17 - 20 September 2013 in Prague, Czech Republic. Further information is at: www.wvc2013.com

The 24th Rabies in the Americas (RITA) meeting will be held October 27-31, in Toronto, Canada and abstracts are now being accepted. Go to the website: www.rita2013.com

ONE HEALTH: RABIES AND OTHER DISEASE RISKS FROM FREE-ROAMING DOGS a special symposium organized by WSAVA and OIE will be held at the OIE Headquarters in Paris, France on November 5, 2013 - November 6, 2013. You can register at www.bsava.com/wsava

2nd GRF One Health Summit 2013, entitled "One Health - One Planet - One Future: Risks and Opportunities" will be held 17 - 20 November 2013 in Davos, Switzerland. See onehealth.grforum.org/

The International Society for Infectious Diseases has announced that the next International Congress on Infectious Diseases will be held in Cape Town, South Africa from the 2nd to the 5th of April 2014. Sign up for the 16th ICID mailing list at <http://www.isid.org/icid/>



The editor of the Alliance newsletter is Louise Taylor and the layout and typesetting is by Pete Else. If you have news items about rabies, please contact Louise at louise.taylor@rabiesalliance.org. For further information on the Alliance's work see www.rabiesalliance.org