

October - November 2017

EURL news

News related to the EURL activities

Inter-laboratory test for tetracycline determination on teeth 2017: Test now ongoing

Further to the call for registration for the inter-laboratory test for tetracycline determination 2017, 13 NRLs volunteered to perform the test. The samples were sent to participants on 2 October 2017 under dry ice. Each panel is composed of several positive or negative red fox jaws for tetracycline, an acknowledgment form and a result form. The acknowledgment and result forms are expected back to the EURL by 30 October 2017 at the latest. As usual, a technical questionnaire related to the technique used has to be online answered.

Workshop for rabies 2017: Report online

The 9th workshop for rabies was held on 13 and 14 June 2017 in Budapest, Hungary. The annual rabies European Union Reference Laboratory (EURL) meeting gathered a total of 89 participants, among them 38 from the European Union Member States (EUMS) and 11 from European Union bordering countries supported by TAIEX and 30 from other laboratories from all over the world. The report of this meeting has been sent on 28 September to all participants and is now available online, as well as the presentations, in the private part of the website (for NRL members only).

Rabies serology news

News related to rabies serology activities

Rabies serology inter-laboratory test 2017

Seventy-two out of the eighty-one participating laboratories successfully passed the 2017 rabies serology inter-laboratory test. Congratulation to all of them! As usual, a link to a satisfaction questionnaire has been sent to the participating laboratories for quality assurance matters. The list of the laboratories authorised to carry out the serological tests to monitor the effectiveness of the anti-rabies vaccination is available at the bottom of the "Approved rabies serology laboratories" page of the ec.europa.eu website: https://ec.europa.eu/food/animals/pet-movement/approved-labs en.

News from laboratories & International Institutions

News related to the EURL for rabies laboratory network and rabies community

Policy update on lifesaving rabies immunization

[Relayed from www.who.int] "On 18 October 2017, the Strategic Advisory Group of Experts (SAGE) on Immunization approved all of the recommendations proposed by the SAGE working group on rabies, as an update to the current WHO position paper on rabies immunization based on new evidence and experience in programme implementation. SAGE guides progress on global strategies and policies regarding vaccine-preventable diseases. A SAGE rabies working group was established in July 2016 to review new evidence that would merit updating of the 2010 WHO position paper on rabies vaccines. The working group conducted systematic reviews of published and unpublished literature, and assembled data and programme experience from countries to review options for pre-exposure and post-exposure immunization. [...] (Read full article on www.who.int...)

In the spotlight: the National Rabies Control Programme of the Ministry of Agriculture in Tunisia

[Relayed from www.rr-africa.oie.int] On September 25 and 26, 2017, the OIE Sub-Regional Representation for North Africa organised a "Workshop on the Rabies National Control Programme of the Tunisian Ministry of Agriculture: feedback from the field, state of play and ways of improvement", held in Tunis, Tunisia, in collaboration with the Tunisian Veterinary Services (Directorate-General of Veterinary Services). The workshop, funded by the European Union, represented by the European Commission and the European Parliament, as part of the project to Strengthen Veterinary Services in Developing Countries (SVSDC), was aimed at the decentralised offices of the Ministry of Agriculture involved in the fight against rabies. [...] (Read full article on rr-africa.oie.int...)

<u>2018</u>	
01-04 March	18th International Congress on Infectious Diseases (ICID), Buenos Aires (Argentina)
20-22 March	6e Better Foods for Better Health Séminaire, Veyrier-du-Lac (France)
23-25 March	10th Annual International Congress of Antibodies-2018 (ICA-2018), Washington (USA)
19-20 April	4th Global Summit on Virology and Vaccines Conference, Valencia (Spain)
23-25 April	4th MEEREB Meeting, Veyrier-du-Lac (France)
24-26 April	OIE Sub-Regional Conference on rabies in southern Africa, Windhoek (Namibia)
May	Partner for rabies prevention, Wolfsberg (Switzerland)
02-04 May	7th Northern European Conference on Travel Medicine (NECTM7), Stockholm (Sweden)
14-15 May	ICV 2018 : 20th International Conference on Veterinary, London (United Kingdom)
22-25 June	5th International One Health Congress, Saskatoon (Canada)

Rabies notifications

22 Nov 2017 ★ Morocco

Rage, canine - Maroc (07): identification, vaccination, et sterilisation des chiens et chats errants

20 Nov 2017 **★** Morocco

Rabies - Morocco (06): dogs slaughter banned / الكلاب نج طوسيتم (6) المغوب - الكلاداء

Rage, canine - Maroc (06): l'abattage des chiens sera bientôt banni

18 Nov 2017 **★** Israel

المنافق ضانشار موان، :(4) بلوائلي - الكلداء / Rabies - Israel (04): animal, spread, human exposure

16 Nov 2017 * Russia

Бешенство, человек - Россия (Владимирская область)

06 Nov 2017 **★** Israel

Rabies - Israel (03): animal, spread, alert / تخذوانشار ، موان (3): يقذوانشار ، موان الكباداء

21 Oct 2017 * France

Rabies - France: (Auvergne - Rhône-Alpesboy) ex Sri Lanka, canine, human exp.

Suspect human rabies case in France: child got infected in Sri Lanka

21 Oct 2017 ***** Tunisia

Rage, canine, humaine - Tunisie (03): (Nabeul), incidence

الحوانات في الإمابة (نالي) :(3) قين - الكلداء / Rabies - Tunisia (03): (Nabeul) incidence in animals

15 Oct 2017 **★** Algeria

Rabies (43): Algeria (TO) comment

13 Oct 2017 * Africa, Asia, Europe

Rabies (42): Africa, Asia, Europe, human, animal

12 Oct 2017 ***** Egypt

الحو انطحة العالمية المظمة العثلبة الحوانات ، (الجديالوادي) ضو - الكباء / Al Wadi Al Jadid) herbivores, OIE (الجديالوادي) خو - الكباء /

Rabies, Egypt, (Follow-up report No. 2)



06 Oct 2017 * Algeria

الحالات وزيو (ونزي): (5): الغواؤ - الكلااء / Rabies - Algeria (05): (Tizi Ouzou) distribution of cases

Rage, canine, humaine - Algérie (05): (Tizi Ouzou), distribution des cas

02 Oct 2017 * Algeria

الحالات عد (علي) : (4) الغواؤ - الكلداء / Rabies - Algeria (04): (Jijel) disease situation

Rage, canine, humaine - Algérie (04): (Jijel) situation

30 Sep 2017 **★** Morocco

والهوالإنجازات: (5) المغرب - الكلداء / Rabies - Morocco (05): achievements and constraints

Rage, canine, humaine - Maroc: état des lieux

28 Sep 2017 ★ World Rabies Day 2017 & rabies situation assessment

Rabies vaccination - research: unexpected benefits

World Rabies Day 2017: eradication prospects discussed

Rabies - worldwide (02): is global eradication of human cases achievable by 2030? غهدول مكي الثويلكات في المقام أنداء جيع - الكبداء /?Rabies - worldwide (02)

20309

26 Sep 2017 * Tunisia

Rabies: In the spotlight: the National Rabies Control Programme of the Ministry of Agriculture in Tunisia

26 Sep 2017 **★** Tunisia

Rabies - Tunisia (2): no human cases in 2017 : وَفِيْ صِالْكِدَاء / Rage, canine, humaine - Tunisie: aucun cas humains en 2017

Ec.europa.eu website rabies notifications

(Total cases of rabies reported in Europe from 01/01/2017 to 21/11/2017)

https://ec.europa.eu/food/sites/food/files/animals/docs/ad_adns_outbreaks-per-disease.pdf (This link is also valid for other diseases).

Rabies publications

A selection of publications on rabies, diagnosis, virology and vaccinology.

Animal and human rabies

Modeling of a procedure for unmasking the foxes during activities on the elimination of biosafety threats related to rabies Vysotska, O., et al. 2017. Eastern-European Journal of Enterprise Technologie 5(10), 46-54.

http://journals.uran.ua/eejet/article/view/109868

Second case of European bat lyssavirus type 2 detected in a Daubenton's bat in Finland

Nokireki, T., et al. 2017. Acta Veterinaria Scandinavica 59(1).

https://actavetscand.biomedcentral.com/articles/10.1186/s13028-017-0331-y

Substantial reductions in rabies, but still a lot to be done

Schneider, M. C., et al. 2017. Lancet Glob Health 5(10), e957-e58.

http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(17)30342-X/abstract

Diagnosis, virology and vaccinology

Comparative pathogenesis of rabies in bats and carnivores, and implications for spillover to humans

Begeman, L., et al. 2017. Lancet Infect Dis., in press.

http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(17)30574-1/supplemental

Comparison of a novel human rabies monoclonal antibody to human rabies immunoglobulin for post-exposure prophylaxis: A phase 2/3 randomized, single blind, non-inferiority, controlled study

Gogtay, N. J., et al. 2017. Clin Infect Dis., in press.

https://www.ncbi.nlm.nih.gov/pubmed/29020321



Development and characterization of novel chimeric monoclonal antibodies for broad spectrum neutralization of rabies virus

Kim, P. K., et al. 2017. PLoS ONE 12(10), e0186380.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0186380

Development and evaluation of a RT-qPCR assay for fast and sensitive rabies diagnosis

Dedkov, V. G., et al. 2017. Diagnostic Microbiology and Infectious Disease, in press

http://www.sciencedirect.com/science/article/pii/S0732889317302833

Development and validation of an immunoperoxidase antigen detection test for improved diagnosis of rabies in Indonesia

Rahmadane, I., et al. 2017. PLoS Negl Trop Dis 11(11), e0006079.

http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0006079

Development of molecular confirmation tools for swift and easy rabies diagnostics

Schlottau, K., et al. 2017. Virol J 14(1).

https://virologyj.biomedcentral.com/articles/10.1186/s12985-017-0853-y

Efficacy of rabies vaccines in dogs and cats and protection in a mouse model against European bat lyssavirus type 2

Nokireki, T., et al. 2017. Acta Veterinaria Scandinavica 59(1).

https://actavetscand.biomedcentral.com/articles/10.1186/s13028-017-0332-x

Efficacy of the oral rabies virus vaccine strain SPBN GASGAS in foxes and raccoon dogs

Freuling, C. M., et al. 2017. Vaccine, in press.

http://www.sciencedirect.com/science/article/pii/S0264410X1731366X?via%3Dihub

Enhanced Immune Response to Rabies Viruses by the Use of a Liposome Adjuvant in Vaccines

Miao, L., et al. 2017. Viral Immunol., in press.

http://online.liebertpub.com/doi/10.1089/vim.2017.0093

Evaluation of the efficacy of the Japanese rabies RC-HL strain vaccine in domestic dogs using past and present data: Prediction based on logistic regression and meta-analysis

Kwan, N. C. L., et al. 2017. Preventive Veterinary Medicine 147, 172-77.

http://www.sciencedirect.com/science/article/pii/S0167587717304464?via%3Dihub

Factors influencing the outcome of primary immunization against rabies in young dogs

Tasioudi, K. E., et al. 2017. Veterinary Microbiology, in press.

http://www.sciencedirect.com/science/article/pii/S0378113517309586

Factors influencing the success of aerial rabies vaccination of foxes

Henning, J., et al. 2017. Sci Rep 7(1), 14376.

https://www.nature.com/articles/s41598-017-14615-2

Generation of a novel live rabies vaccine strain with a high level of safety by introducing attenuating mutations in the nucleoprotein and glycoprotein

Nakagawa, K., et al. 2017. Vaccine, in press.

http://www.sciencedirect.com/science/article/pii/S0264410X17311386

A genetically modified rabies vaccine (ERAGS) induces protective immunity in dogs and cattle

Yang, D. K., et al. 2017. Clinical and Experimental Vaccine Research 6(2), 128-34.

https://synapse.koreamed.org/DOIx.php?id=10.7774/cevr.2017.6.2.128

Infection of neuroblastoma cells by rabies virus is modulated by the virus titer

Fuoco, N. L., et al. 2017. Antiviral Research, in press.

http://www.sciencedirect.com/science/article/pii/S0166354217306149

Inhibition of rabies virus replication by interferon-stimulated gene 15 and its activating enzyme UBA7

Zhao, P., et al. 2017. Infect Genet Evol., in press.

http://www.sciencedirect.com/science/article/pii/S1567134817303544

Large protein as a potential target for use in rabies diagnostics

Santos Katz, I. S., et al. 2017. Acta Virologica 61(3), 280-88.

http://www.elis.sk/index.php?page=shop.product_details&flypage=flypage.tpl&product_id=5275&category_id=136&option=com_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virtuenderal_virt



Molecular function analysis of rabies virus RNA polymerase L protein by using an L gene-deficient virus

Nakagawa, K., et al. 2017. Journal of Virology 91(20).

http://jvi.asm.org/content/91/20/e00826-17

Near-infrared fluorescent protein iRFP720 is optimal for in vivo fluorescence imaging of rabies virus infection

Isomura, M., et al. 2017. Journal of General Virology, in press.

http://jgv.microbiologyresearch.org/content/journal/jgv/10.1099/jgv.0.000950.v1

A novel approach to a rabies vaccine based on a recombinant single-cycle flavivirus vector

Giel-Moloney, M., et al. 2017. Vaccine, in press.

http://www.sciencedirect.com/science/article/pii/S0264410X17311532

An optimized HMGB1 expressed by recombinant rabies virus enhances immunogenicity through activation of dendritic cells in mice

Wang, Z., et al. 2017. Oncotarget 8(48), 83539-54.

http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path[]=18368&path[]=58916

Oral vaccination of wildlife using a vaccinia-rabies-glycoprotein recombinant virus vaccine (RABORAL V-RG®): A global review

Maki, J., et al. 2017. Veterinary Research 48(1).

https://veterinaryresearch.biomedcentral.com/articles/10.1186/s13567-017-0459-9

Phosphoprotein Gene Contributes to the Enhanced Apoptosis Induced by Wild-Type Rabies Virus GD-SH-01 In Vitro Tian, Q., et al. 2017. Front Microbiol 8, 1697.

https://www.frontiersin.org/articles/10.3389/fmicb.2017.01697/full

Production of Recombinant Rabies Virus Glycoprotein by Insect Cells in a Single-Use Fixed-Bed Bioreactor

Ventini-Monteiro, D. C., et al. 2018. Methods Mol Biol 1674, 87-94.

http://www.springerprotocols.com/BookToc/doi/10.1007/978-1-4939-7312-5

Protection of bats (Eptesicus fuscus) against rabies following topical or oronasal exposure to a recombinant raccoon poxvirus vaccine

Stading, B., et al. 2017. PLoS Negl Trop Dis 11(10), e0005958.

http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005958

Quantitative analysis of anti-rabies antibodies in dogs clinically suspected for rabies

Thakur, P., et al. 2017. Indian Journal of Veterinary Pathology 41(3), 214-16.

http://www.indianjournals.com/ijor.aspx?target=ijor:ijvp&volume=41&issue=3&article=009

A Self-Killing Rabies Virus That Leaves a Trace on the DNA

Menegas, W., et al. 2017. Trends in Neurosciences, in press.

http://www.sciencedirect.com/science/article/pii/S0166223617301625

Single visit rabies pre-exposure priming induces a robust anamnestic antibody response after simulated post-exposure vaccination: results of a dose-finding study

Jonker, E. F. F., et al. 2017. J Travel Med 24(5).

https://academic.oup.com/jtm/article/24/5/tax033/3954783

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