



Centro de Documentación / Documentation Center

Objetivos/ Objectives

Identificar y atender las necesidades de información, adquisición, organización, almacenamiento, generación, uso y difusión de la información en salud pública veterinaria y proveer recursos bibliográficos técnicos-científicos al equipo de profesionales de la unidad y a los usuarios externos.

Identify and take care of the needs of information, acquisition, organization, storage, generation, use and diffusion of the information in veterinary public health and provide technical scientific bibliographical resources to the professional staff of the unit and to the users external.

Temas de interés general / Subjects of general interest

Nuevo estatuto actualiza el marco institucional y operativo de BIREME



BIREME/OPS/OMS vive uno de los momentos más importantes en sus 42 años de historia dedicados a la cooperación técnica en información y comunicación científica en América Latina y el Caribe. El Consejo Directivo de la Organización Panamericana de Salud (OPS) aprobó el estatuto de la institución que prevé una nueva estructura de gobierno, financiación y el alcance de actuación de la institución. Asimismo también fue aprobada la composición del primer Comité Consultivo de BIREME, que contará con representantes de Argentina, Chile, Jamaica, México y República Dominicana

<http://espacio.bvsalud.org/boletim.php?articleId=11091649200915>

Informaciones disponibles en formato electrónico / Information available in electronic format

Animales Modificados Genéticamente, parasitología / Animals Genetically Modified, parasitology



Control of vector populations using genetically modified mosquitoes

Wilke ABB, Gomes AC, Natal D, Marrelli M
Rev Saúde Pública 2009; 43 (5): 869-874

The ineffectiveness of current strategies for chemical control of mosquito vectors raises the need for developing novel approaches. Thus, we carried out a literature review of strategies for genetic control of

mosquito populations based on the sterile insect technique. One of these strategies consists of releasing radiation-sterilized males into the population; another, of integrating a dominant lethal gene under the control of a specific promoter into immature females. Advantages of these approaches over other biological and chemical control strategies include: highly species-specific, environmental safety, low production cost, and high efficacy. The use of this genetic modification technique will constitute an important tool for integrated vector management.

Text in English

http://www.scielo.org/pdf/rsp/v43n5/en_497.pdf

Text in Portuguese

<http://www.scielo.org/pdf/rsp/v43n5/497.pdf>

Brucellosis / Brucelosis



Respuesta serológica a la vacunación contra brucelosis en bovinos provenientes de un rebaño libre vacunados con dos dosis de vacuna Cepa RB-51

Ramirez C, Ernest S, Elvinger F
Arch med vet. 2009; 41 (2): 171-174

Se realizó una encuesta prospectiva con la finalidad de determinar la respuesta serológica a las pruebas oficiales aplicadas en Chile para la detección de brucelosis bovina que son Rosa de Bengala (RB), Fijación de Complemento (FC) y Elisa de Competencia (C-Elisa), en hembras adultas vacunadas con dos dosis de vacuna Cepa RB-51 provenientes de un rebaño libre de la enfermedad con certificación vigente otorgada por el Servicio Agrícola y Ganadero (SAG) del Ministerio de Agricultura de Chile. Se seleccionaron 100 hembras bovinas mayores de 18 meses con la finalidad de tener una confianza de un 90% de que la proporción de positivos no será mayor a un 2,95% si todos los animales muestreados resultan negativos. Los bovinos fueron vacunados vía subcutáneos con vacuna Cepa RB-51 en dosis de $1-3.4 \times 10^{10}$ UFC con una diferencia de 30 días entre la primera y segunda aplicación; la fecha de la primera vacunación correspondió al día cero del estudio. Los días 0, 30 y 60 se tomaron muestras de 10 ml de sangre por venopunción coccígea de cada animal seleccionado. Las muestras se procesaron en el Laboratorio de Referencia de Brucelosis Bovina del SAG, Osorno, X Región, Chile. Ningún animal presentó reacción serológica atribuible a la vacunación con RB-51 que puedan interferir con las pruebas diagnósticas actualmente utilizadas para la detección de la brucelosis bovina.

Text in Spanish

<http://www.scielo.cl/pdf/amv/v41n2/art11.pdf>

Encefalopatía Espongiforme Bovina (BSE) / Bovine Spongiform Encephalopathy (BSE)



Estimating the impact on the food chain of changing bovine spongiform encephalopathy (BSE) control measures: The BSE Control Model

Adkin A, Webster V, Arnold ME, Wells GA, Matthews D
Prev Vet Med. 2009 Oct

The decline in the bovine spongiform encephalopathy (BSE) epidemic in Great Britain (GB) demands a review of control strategies to ensure that they remain proportionate. Amongst controls that are subject to review are those intended to minimise the risk of BSE exposure of consumers through food. Such risk mitigation steps are costly, and the relative impact of each in terms of human exposure to BSE infectivity is not known. This risk assessment, termed the BSE Control Model, aims to estimate by use of stochastic simulation the impact of testing of cattle at slaughter and the removal of Specified Risk Materials (SRM) on potential BSE infectivity consumed. This paper describes the use of the model to

investigate the effect of different risk management methods that have been or could be implemented between 2005 and 2010. Our results suggest that the amount of infectivity consumed in 2005 with the Over Thirty Month (OTM) rule in place was a mean of 0.03 bovine oral ID(50) (BO ID(50)). This is an extremely low amount, particularly considering that it would be spread over, on average, 236 infected carcasses that would be further sub-divided into portions for human consumption. The highest contributor to the total amount of infectivity consumed per year is spinal contamination at carcass splitting (35%). In 2006 the OTM scheme was discontinued and head meat was again permitted into the food chain. These changes resulted in an increase in the amount of infectivity consumed, rising to an estimated 28 BO ID(50) in 2006, and 19 BO ID(50) in 2007. In 2008 the age at removal of vertebral column was raised from 24 to 30 months, and an estimated 24 BO ID(50) of infectivity was consumed. At the beginning of 2009 the age at testing of cattle was raised to 48 months for healthy slaughter, emergency slaughter and fallen stock. Under these conditions, an estimated mean of 24 BO ID(50) will be consumed in 2009, decreasing to 20 BO ID(50) in 2010. Even though presented in terms of bovine rather than human oral ID(50), such estimates represent an extremely low exposure of the British population. Considerable uncertainty would surround any attempt to try to convert such exposure into estimates of new cases of vCJD, but the most recent estimates of the size of the species barrier between cattle and humans (4000, EFSA, 2006) suggest that there would be few, if any, new cases of vCJD arising from such exposure levels.

Text in English (article in press)

Enfermedad de Chagas / Chagas Disease



La enfermedad de Chagas en las Américas: una perspectiva de ecosalud

Briceno-Leon R

Cad Saúde Pública 2009; 25 (suppl.1): S71-S82

El proceso de transmisión de la enfermedad de Chagas ha estado históricamente relacionado con los patrones de ocupación territorial de los asentamientos humanos. En las áreas rurales puede ocurrir más fácilmente el encuentro del vector, los agentes patógenos y los seres humanos, por las condiciones de la vivienda y la pobreza existente en estas zonas. Los procesos migratorios permanentes o estacionales han jugado un papel igualmente importante en el transporte de los vectores y en la infección de la población en las zonas urbanas. Las nuevas fronteras agrícolas del Amazonas se han establecido nuevas áreas de transmisión de la enfermedad. La atención dada a los bancos de sangre ha permitido disminuir la transmisión transfusional, pero la inmigración internacional ha cambiado la situación epidemiológica, pues en Estados Unidos y España viven miles de enfermos que habían sido infectados décadas antes y no encuentran adecuada atención. Los avances en el conocimiento y el control de la enfermedad son mostrados en el artículo, señalando las limitaciones existentes en cuanto al mejoramiento de las condiciones ambientales y de vivienda de los pobres.

Text in Spanish

<http://www.scielo.br/pdf/csp/v25s1/07.pdf>

Enfermedades Desatendidas / Neglected Diseases



Neglected tropical diseases in Brazil

Lindoso JAL, Lindoso AABP

Rev Inst Med trop Sao Paulo 2009 Out; 51 (5): 247-253

Poverty is intrinsically related to the incidence of Neglected Tropical Diseases (NTDs). The main countries that have the lowest human development indices (HDI) and the highest burdens of NTDs are located in tropical and subtropical regions of the world. Among these countries is Brazil, which is ranked 70th in HDI. Nine out of the ten NTDs established by the World Health Organization (WHO) are present in Brazil. Leishmaniasis, tuberculosis, dengue fever and leprosy are present over almost the entire Brazilian territory. More than 90% of malaria cases occur in the Northern region of the country, and lymphatic filariasis and onchocerciasis occur in outbreaks in a particular region. The North and Northeast regions of Brazil have the lowest HDIs and the highest rates of NTDs. These diseases are considered neglected because there is not important investment in projects for the development of new drugs and vaccines and existing programs to control these diseases are not sufficient. Another problem related to NTDs is co-infection with HIV, which favors the occurrence of severe clinical manifestations and therapeutic failure. In this article, we describe the status of the main NTDs currently occurring in Brazil and relate them to the HDI and poverty.

Text in English

<http://www.scielo.br/pdf/rimts/v51n5/v51n5a03.pdf>

Epidemiología Veterinaria / Veterinary Epidemiology



The role of veterinary epidemiology in combating infectious animal diseases on a global scale: the impact of training and outreach programs

Salman MD

Prev Vet Med. 2009 Dec; 92 (4): 284-7

The effectiveness of detection and control of highly contagious animal diseases is dependent on a solid understanding of their nature and implementation of scientifically sound methods by people who are well trained. The implementation of specific detection methods and tools requires training and application in natural as well as field conditions. The aim of this paper is to present the design and implementation of training in disease investigation and basic veterinary epidemiology in selected countries using the Highly Pathogenic Avian Influenza (HPAI) H5N1 Asia strain as a disease detection model. Indonesia, Egypt, Nigeria, Turkey, and Vietnam were each identified as either a priority country where AI was spreading rapidly or a country at risk for infection. In each of these countries, a training program on epidemiological concepts, field investigation methodology, and detection of H5N1 Asia strain cases was conducted. This report includes the impact of these training sessions on national animal health programs, including follow-up activities of animal health officers who went through these training sessions.

Text in English



Veterinary epidemiology in Latin America

Urcelay SP

Prev Vet Med. 2009 Dec; 92 (4): 288-95

Veterinary epidemiology began in different Latin American countries during the 1960s and the 1970s in different universities and state-run institutes of animal health. The discipline evolved as a continuation of the activities veterinarians carried out in the areas of public health, infectious diseases, biostatistics, and the planning and administration of animal health programs. From the outset, the concepts were oriented towards covering the whole spectrum of factors involved in animal health, including political and social factors. Subsequently, the aforementioned factors were complemented with scientific and methodological support, backed by post graduate qualifications offered by the North America and

European universities, together with financial support from intergovernmental organizations. One important contribution for the Latin American veterinary epidemiology and economics community was the ISVEE 10 which took place in Chile in 2003, which served to link many professionals and scientists with the world of people working in those themes. Whilst the study programs of veterinarians of the Latin American universities have different forms and depths when delivering competencies in epidemiology, most have similar conceptual and methodological elements. Ideally, the profile of an epidemiology teacher should include the qualities of dreamer and explorer of new theme worlds, combined with simplicity and openness to the world. A teacher's knowledge should transcend worlds and be enriched by what takes place outside the bounds of their geographic or university frontiers.

Text in English

Esquistosomiasis / Schistosomiasis



***Schistosoma*-associated chronic septicemic salmonellosis: evolution of knowledge and immunopathogenic mechanisms**

Muniz-Junqueira MI, Tosta CE, Prata A

Rev Soc Bras Med Trop. 2009 Ago; 42 (4): 436-445

Chronic septicemic salmonellosis is an individualized clinical entity characterized by prolonged fever with enlargement of the liver and spleen that occurs in *Schistosoma*-infected individuals who are coinfecting with *Salmonella*. Several immunopathogenic mechanisms are involved, and they depend on the peculiarities of the interactions between *Salmonella* and various species of the genus *Schistosoma*. The modifications to the immune system that are caused by parasite infection are responsible for the evolution of the disease. In this review, we analyze the evolution of the knowledge on this entity and discuss the possible immunopathogenic mechanisms that contribute towards its development.

Text in Portuguese

<http://www.scielo.br/pdf/rsbmt/v42n4/a15v42n4.pdf>

Fiebre aftosa / Foot and Mouth Disease



Foot and mouth disease virus vaccines

Rodriguez LL, Grubman MJ

Vaccine 2009 Nov; 27 Suppl 4: D90-4

Foot and mouth disease (FMD) is a highly infectious and economically devastating disease of livestock. Although vaccines, available since the early 1900s, have been instrumental in eradicating FMD from parts of the world, the disease still affects millions of animals around the globe and remains the main sanitary barrier to the commerce of animals and animal products. Currently available inactivated antigen vaccines applied intramuscularly to individual animals, confer serotype and subtype specific protection in 1-2 weeks but fail to induce long-term protective immunity. Among the limitations of this vaccine are potential virus escape from the production facility, short shelf life of formulated product, short duration of immunity and requirement of dozens of antigens to address viral antigenic diversity. Here we review novel vaccine approaches that address some of these limitations. Basic research and the combination of reliable animal inoculation models, reverse genetics and computational biology tools will allow the rational design of safe and effective FMD vaccines. These vaccines should address not only the needs of FMD-free countries but also allow the progressive global control and eradication of this devastating disease.

Text in English

Fiebre Amarilla / Yellow Fever



Fiebre Amarilla: guía de campo para la vigilancia

PANAFTOSA-OPS/OMS

2009

Text in Spanish

http://www.panaftosa.org.br/Comp/Zoonoses/Epizootias/doc/FL_febre_amarela.pdf

Leishmaniasis



Análise TG-ROC de testes de imunofluorescência no diagnóstico de leishmaniose visceral canina

Silva RM, Laurenti MD, Gomes AC, Nogueira YL

Rev Saúde Pública 2009

OBJECTIVE: To analyze the accuracy of the diagnosis of two protocols of indirect immunofluorescence assays for canine visceral leishmaniasis.

METHODS: Dogs from the seroepidemiological survey conducted in an endemic area of the cities of Araçatuba and Andradina, in Northwestern São Paulo state, in 2003, and in a non-endemic area of the metropolitan region of São Paulo, were used to assess two protocols of indirect immunofluorescence assay (IFA) for leishmaniasis: one using a *Leishmania major* heterologous antigen (IFA-BM) and another using a *Leishmania chagasi* homologous antigen (IFA-CH). Two-graph receiver operating characteristic (TG-ROC) analysis was used to estimate accuracy. TG-ROC analysis compared 1:20 dilution readings of the homologous antigen (IFA-CH), considered as reference test, with IFA-BM dilutions (heterologous antigen).

RESULTS: The 1:20 dilution used in the IFA-CH test showed the best contingency coefficient (0.755) and the highest strength of association between the two variables studied (chi-square=124.3). Thus, it was considered the test reference dilution in comparisons with different IFA-BM test dilutions. The best IFA-BM results were obtained from 1:40 dilutions with the best contingency coefficient (0.680) and highest strength of association (chi-square=80.8). With the change in the cut-off point, recommended for the IFA-BM 1:40 dilution in this analysis, the specificity parameter value rose from 57.5% to 97.7%, even though the 1:80 dilution showed the best sensitivity estimate (80.2%), with the new cut-off point.

CONCLUSIONS: TG-ROC analysis can provide important information about diagnostic tests, in addition to offering suggestions on cut-off points that can improve test sensitivity and specificity estimates and assessing these tests in terms of the best cost-benefit ratio.

Text in Portuguese (article in press)

<http://www.scielosp.org/pdf/rsp/2009nahead/7292.pdf>



Leishmania (Leishmania) infantum/chagasi: histopathological aspects of the skin in naturally infected dogs in two endemic areas

Calabrese KS, Cortada VM, Dorval ME, Lima MA, Oshiro ET, Souza CS, Silva-Almeida M,

Carvalho LO, da Costa SC, Abreu-Silva AL

Exp Parasitol. 2009 Oct

In the New World, visceral leishmaniasis (VL), which is a progressive disease and frequently fatal, is caused by *Leishmania (Leishmania) infantum/chagasi*. It is endemic in many regions of Brazil and occasionally occurs in non-endemic regions when dogs from an endemic area are introduced. The aim of the present study is to compare different skin infection patterns of dogs from two leishmaniasis endemic areas. A histological analysis of dogs from Campo Grande, Mato Grosso do Sul state, a region where epidemic episodes are currently taking place, showed dermic inflammatory infiltrates, composed of

numerous vacuolated parasitized macrophages, few lymphocytes, plasma cells and many degranulated mast cells. In the other region of the study, São Luís, Maranhão state, the skin of dogs presented a remarkable inflammatory reaction composed mainly of plasma cells, lymphocytes and very few parasites. We concluded that there is a difference in the skin lesion patterns of dogs with leishmaniasis that is directly related to the endemic area where the animals live.

Text in English (article in press)

Malaria

REVISTA CHILENA de
INFECTOLOGÍA **Ética e investigación en la historia de la malaria**
Ledermann D W, Valle B G.
Rev Chilena Infectol. 2009 Oct; 26 (5): 466-71

La investigación científica en clínica es absolutamente necesaria para el desarrollo del saber médico. No obstante, no siempre el gran progreso alcanzado por la Medicina se ha obtenido respetando la persona humana. En particular, a partir de 1880, cuando Laveran constató por primera vez la naturaleza protozoaria de la malaria, el desarrollo del conocimiento sobre el paludismo ha sido muy notable, pero hasta la mitad del siglo XX estos logros fueron, en muchos casos, fruto de experimentos que hoy resultan en extremo discutibles desde el punto de vista ético, tanto los dedicados al estudio de la biología y de la fisiopatología, como especialmente los ensayos de carácter farmacológico efectuados en individuos sanos para probar moléculas con acción antimalárica real o presunta.

Text in Spanish

<http://www.scielo.cl/pdf/rci/v26n5/art14.pdf>

revista brasileira de
epidemiologia **Mapping malaria risk using environmental and anthropic variables**
Rincón-Romero ME, Londoño JE
Rev bras epidemiol. 2009 Set; 12 (3): 338-354

A pesar de muchas investigaciones en la identificación de las zonas con presencia de malaria, es urgente profundizar las técnicas de su mapeo para lograr mejores aproximaciones, para ayudar a focalizar los esfuerzos y recursos en prevención, mitigación y estrategias de erradicación del mosquito y eventualmente de la enfermedad. Usando modelación espacial distribuida con herramientas de Sistemas de Información Geográfica (SIG), el presente estudio propone una metodología para el mapeo y la zonificación del riesgo de malaria en el municipio de Buenaventura - Colombia. Se presenta una estrategia de adaptación del modelo propuesto por Craig et al.¹ (1999) que usa información climática, adaptándolo a las condiciones propias del área de estudio en cuanto a escala y resolución espacial. Se adicionaron variables geomorfológicas y antrópicas para mejorar la localización espacial de las zonas con mayor riesgo de contraer la enfermedad, refinando la zonificación, y se contrastó espacialmente con los sitios reportados por las entidades de salud². La comparación de los resultados muestra la disminución del área que se obtuvo inicialmente con la aplicación del modelo de Craig et al.¹ de 5422.4 km² (89.1% del territorio del municipio) a 624.3km² (aproximadamente 10% del área del municipio), dando una reducción total del 78.8% al incluir las variables ambientales y antrópicas en la producción del mapa de riesgo. Los datos muestran que de 9,860 casos reportados durante 2001 y 2005 para 20 localidades seleccionadas con base en la cantidad de registros de malaria², 1,132 se ubicaron en las zonas identificadas de muy alto riesgo, 7,662 se sobrepusieron en las zonas de riesgo moderado y 1,066 casos en la zona de riesgo bajo, mostrando que el 89% de ellos se ubican en las zonas modeladas con mayor riesgo de malaria.

Text in English

<http://www.scielo.br/pdf/rbepid/v12n3/05.pdf>

Rabia / Rabies



Observations of sylvatic rabies in Northern Argentina during outbreaks of paralytic cattle rabies transmitted by vampire bats (*Desmodus rotundus*)

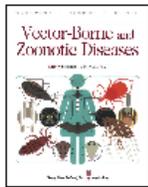
Delpietro HA, Lord RD, Russo RG, Gury-Dhomen F
J Wildl Dis. 2009 Oct; 45 (4):1169-73

During rabies outbreaks in cattle (paralytic rabies) in Argentina associated with the common vampire bat *Desmodus rotundus*, rabies was observed in marsh deer (*Blastocerus dichotomus*), red brocket deer (*Mazama americana*), capybara (*Hydrochoerus hydrochaeris*), savanna fox (*Cerdocyon thous*), and great fruit-eating bat (*Artibeus lituratus*). Rabies could constitute a threat to the survival of marsh deer in places where they live in small groups, and infection of both great fruit-eating bats and savanna fox represent a risk for humans; both species exhibit aggressiveness and fury when infected.

Text in English

<http://www.jwildlifedis.org/cgi/reprint/45/4/1169>

Rickettsiosis



Serologic survey for rickettsiosis in bats from São Paulo City, Brazil

D'Auria SR, Camargo MC, Pacheco RC, Savani ES, Dias MA, da Rosa AR, de Almeida MF, Labruna MB
Vector Borne Zoonotic Dis. 2009 Oct

Abstract Blood serum samples were collected from 451 bats captured within the São Paulo city from April 2007 to November 2008, and individually tested by indirect immunofluorescence assay against antigens derived from five *Rickettsia* species reported to occur in Brazil: the spotted fever group (SFG) species *R. rickettsii*, *R. parkeri*, *R. amblyommii*, *R. rhipicephali*, and the ancestral group species *R. bellii*. For this purpose, an anti-bat immunoglobulin G was produced and used in the present study. Overall, 8.6% (39/451), 9.5% (34/358), 7.8% (28/358), 1.1% (4/358), and 0% (0/358) serum samples were reactive to *R. rickettsii*, *R. parkeri*, *R. amblyommii*, *R. rhipicephali*, and *R. bellii*, respectively. Endpoint titers of reactive sera ranged from 64 to 256. From 20 bat species of 3 different families (Molossidae, Vespertilionidae, and Phyllostomidae), 46 animals were shown to be reactive to at least one rickettsial antigen. Seropositivity per bat species ranged from 0% to 33.3%. Most of the serologically positive sera reacted with two or more rickettsial antigens. Seropositivity for SFG rickettsial antigens in the absence of reactivity against *R. bellii* (ancestral group species) suggests that bats from São Paulo city can be infected by SFG rickettsiae. The possible role of soft ticks in serving as vectors of SFG rickettsiae to bats within the São Paulo city, associated to its public health risks, is discussed.

Text in English (article in press)

Sistema de monitoreo de enfermedades / Disease monitoring system



Validation of a national disease recording system for dairy cattle against veterinary practice records

Mörk MJ, Wolff C, Lindberg A, Vågsholm I, Egenvall A
Prev Vet Med. 2009 Oct

In Sweden, morbidity in dairy cattle is monitored through a national disease recording system. This

system gives valuable information for research as well as advisory work and genetic evaluation. Our main objective was to evaluate the completeness in the disease recording system. Farm copies of veterinary records (n=851) from 112 herds, from March 2003 to April 2004, were compared with the information registered in the recording system. The evaluation of completeness was performed at two stages: (i) in the raw data transferred from the Swedish Board of Agriculture (SBA) to the Swedish Dairy Association (for records, cases and diagnostic events) and (ii) in the dairy disease database (DDD) at the Swedish Dairy Association (for diagnostic events). The evaluation was stratified by record type: manual and computerized records from state-employed veterinarians and private veterinarians, respectively. The completeness was high both for records (95-100%) and cases (90-99%) except manual records from private veterinarians (76% for records and 74% for cases). The overall completeness for diagnostic events was 75% in the DDD, with significant differences between record types. For all record types other than manual records from private veterinarians, the majority of diagnostic events lost disappeared after registration in the raw data from the SBA. The reasons for loss found suggest that there is potential for improvement. A multilevel logistic regression analysis showed that the completeness of diagnostic events in the DDD depended on region, diagnosis and veterinary employment. The random effect of veterinarian accounted for 35% of the modeled variation. Future studies are needed to assess how the differential misclassification affect estimates based on the data, and how to account for it.

Text in English (article in press)

Sistemas de Producción Animal / Livestock Farming Systems

REVISTA BRASILEIRA
DE ZOOTECNIA



BRASILIAN JOURNAL OF ANIMAL SCIENCE

Qualification of the adaptive capacities of livestock farming systems

Dedieu B

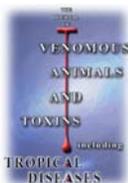
R Bras Zootec. 2009; 38 (n. spe.): 397-404

This paper aims at exploring what is covered by « adapting to last » with a farming systems approach. Long term dynamics can be analysed as adaptive cycles, the system being permanently exposed to disturbances and shocks. Mobilizing the concept of resilience, we analyse the factors that differentiate the principles for long term action the livestock farmers have, principles which give consistency to the family - farms trajectories. With the concept of operational flexibility, we qualify the sources of flexibility the livestock farmers maintain to cope with hazards. They are internal, related to the production process regulation properties, to the technical (adaptive or rigid) specifications, to the sales policies, or external related to the information and commercial networks. Understanding the production process regulation properties require livestock farming systems models (i.e. combining decisional and biological sub-systems) that can simulate how herd dynamics operate under fluctuant rules or productive parameters. It also require to evaluate the room for manoeuvre the work organization let to the farmer. All these aspects are illustrated with on farm studies in herbivore systems (sheep, dairy, beef).

Text in English

<http://www.scielo.br/pdf/rbz/v38nspe/v38nspea39.pdf>

Zoonosis / Zoonoses



Leptospira spp. and Toxoplasma gondii antibodies in vampire bats (Desmodus rotundus) in Botucatu region, SP, Brazil

Zetun CB, Hoffmann JL, Silva RC, Souza LC, Langoni H

J Venom Anim Toxins incl Trop Dis. 2009; 15 (3): 546-552

The destruction of natural ecosystems has caused several problems to humans and other animals; herein we investigate the close relationship among vampire bats, humans and domestic animals. *Toxoplasma gondii* and *Leptospira* spp. infections are two worldwide zoonoses that provoke serious damage to animals. To determine the prevalence of bats seropositive for toxoplasmosis and leptospirosis in the Botucatu region, 204 serum samples of vampire bats (*Desmodus rotundus*) were tested for *T. gondii* antibodies by modified agglutination test (MAT-t) and for *Leptospira* spp. by microscopic agglutination test (MAT-l). No animal was tested positive for *T. gondii* while leptospiral positivity was 7.8% for Pyrogenes, Shermani and Javanica serovars, with titers varying from 100 to 1,600. Thus, it was verified that *D. rotundus* does not play a relevant role in toxoplasmosis epidemiology. However, these bats can be important in the maintenance of *Leptospira* spp. in the environment.

Text in English

<http://www.scielo.br/pdf/jvatitd/v15n3/a14v15n3.pdf>



Knowledge and perceptions of dog-associated zoonoses: Brazos County, Texas, USA

Bingham GM, Budke CM, Slater MR
Prev Vet Med. 2009 Oct

In order to assess the knowledge and perceptions of dog-associated zoonoses in Brazos County, Texas, random digit dialing was used to select 922 households for participation in a cross-sectional telephone survey. The interviews were completed during June 2008 and yielded a response rate of 55% (922/1691). Fifty-six percent of the respondents who completed the questionnaire owned dogs. Eighty-six percent of the respondents indicated they would report being bitten by a dog that they did not own. Five factors were shown to be significantly associated with such reporting. Those respondents who believed that rabies could be transmitted by bats were 5.5 times more likely (95% CI: 1.6, 18.6) to report a dog bite compared to people who did not hold this belief. Respondents who would seek emergency treatment if they believed they had been exposed to rabies were 3.1 times more likely to report a bite (95% CI: 1.8, 5.4). Those who were over 60 years of age were 2.3 times more likely (95% CI: 1.2, 4.4) to report being bitten when compared to respondents who were under the age of 60. Living inside the city limits also increased the chance that the respondent would report being bitten by a dog (OR 2.3, 95% CI: 1.4, 3.9). Females were 2.3 times more likely (95% CI: 1.3, 3.7) to report being bitten than their male counterparts. Dog ownership did not have a significant impact on reporting. Only 85% of respondents stated that they would seek emergency treatment if they believed that they may have been exposed to rabies. In addition, only 59% of respondents were aware that exposure to rabies without treatment could lead to death. While 98% of respondents had heard of rabies and knew that it was possible to get it from a dog, only 54% of respondents knew that worms could be transmitted from dogs to people. This study demonstrated that many people surveyed lacked knowledge about dog-associated zoonotic diseases, which could seriously impact their health and the health of their families. It is important to find a method of getting information out to the public in order to correct this deficiency.

Text in English (article in press)



Salud Pública Veterinaria
Centro Panamericano de Fiebre Aftosa



Veterinary Public Health
Pan American Foot and Mouth Disease Center

Centro de Documentación / Documentation Center (CEDOC)

Teléfono / Phone: 55 21 3661-9045 - <http://www.panaftosa.org.br/>

Se puede tener acceso a las publicaciones en el link citado bajo los resúmenes o solicitarlas a nuestro Centro de Documentación a través del correo electrónico.

It's possible to have access to publications in the mentioned link under the summaries or to ask our Documentation Center for them via e-mail.

apimente@panaftosa.ops-oms.org