How to contribute articles to the SAPUVETNET NEWSLETTER

OBJECTIVE: the objective of the newsletter is to spread information about the project, its development and topical news on Veterinary Public Health as well as to act as a tool to divulgate topics specific to each country involved in the NETWORK.

Any authors interested in publishing articles should contact the project co-ordinator, Dr Daniele De Meneghi, at: daniele.demeneghi@unito.it

Instructions for authors
Articles are formatted into two columns in Comic Sans MS font size 12 and single line spacing. Topic summaries must not be longer than one page (600 words or 4,000 characters) and the author's email address should be included for references and other information. Your submitted article should be in PDF format and roughly 400-500 KB in size. This is to ensure the newsletter can be browsed quickly and downloaded easily from the internet.

The SAPUVETNET II Project will be publishing the first issue of SAPUVETNET, the Veterinary Public Health Journal. The magazine will be edited by the Course of Veterinary Medicine and Animal Husbandry, High University of San Simon in Cochabamba (Bolivia). More information to follow in the third SAPUVETNET II Newsletter (December 2006).

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2nd SAPUVETNET II co-ordination meeting, December 5th to 9th 2005, Lima (Peru).
The second SAPUVETNET II co-ordination meeting took place in December 2005. It was an important occasion for continuing to develop the project’s main activities and for expanding public health topics through an exchange set up between members of the Cayetano Heredia Faculty of Veterinary Science in Lima and SAPUVETNET partners. Interesting epidemiological work on Cisticercosis in Peru was presented by a research group at the host university. At the meeting work for the Zoonosis 2006 conference was prepared jointly, along with the steps to be taken before the third meeting which is scheduled to take place in Buenos Aires (Argentina) in May 2006.

2nd bilateral Latin America – Latin America visit (Bolivia – Peru – Costa Rica)
The second exchange visit scheduled in the 2006 Project, which involved two Latin American countries, took place in February 2006. The project partner, Course of Veterinary Medicine and Animal Husbandry at the High University of San Simon in Cochabamba (Bolivia) organised the bilateral visit in the Cayetano Heredia Faculty of Veterinary Medicine in Lima and the Faculty of Veterinary Science in San José (Costa Rica) where ethics and animal welfare were examined.

At work during the bilateral visit

In May 2006 SAPUVETNET II project partners attended the Congress during the Zoonosis Event in Buenos Aires (Argentina) where some work carried out jointly by network partners was presented, along with results from the various researches carried out.
in each of the Faculties in the Project. Summaries of the research work presented there will be published in the third issue of the SAPUVETNET II newsletter.

A talk on the activities of the SAPUVETNET II Project will be given at the Annual Scientific Conference of the European College of Veterinary Public Health (ECVPH) in Lyon (France) on December 7th and 8th 2006.

BRIEF NOTES

An international course on avian medicine and preservation of free-range birds took place last month in Cuba with practical and theory classes in the clinic of the Cuban Ornithological Association and in an area protected by the Institute for the Protection of Cuban Flora and Fauna.
The SAPUVETNET II Project supported the course providing classes on Animal Welfare and Avian Zoonoses.

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A student from the Faculty of Veterinary Medicine in Zaragoza (Spain) completed a technical and practical scientific exchange visit at the Faculty of Veterinary Medicine and Animal Husbandry at the Cayetano Heredia University in Lima (Peru). Topics discussed during the visit were related to several aspects of Veterinary Public Health.
The student exchange is an additional accomplishment of the SAPUVETNET II Project towards strengthening relations between the various Network partners institutionally and academically.

OTHER NETWORKS

COLLABORATION WITH THE INTEGRATED CONSORTIUM ON TICKS AND TICK-BORNE DISEASES (ICTTD-3) PROJECT

ICTTD-3 is a Coordinated Action (CA) financially supported by INCO, the International Cooperation program of the European Union. The aim of the CA is to support a research program on tick-borne diseases (TBD), jointly executed by a consortium
of 45 institutions in 30 different countries. ICTTD-3 is directed by a Steering Committee with six members.

**ACTIONS, ACTIVITIES AND OBJECTIVES**

CA will focus on tick-host-pathogen interactions to identify concrete means of control in order to reduce the prevalence of TBD in tropical and sub-tropical countries. The current ICTTD-3 project (2004-2008) is a continuation of previous programmes; it has developed into a large consortium of researchers working on Ticks & TBD, with over 1,000 registered scientists worldwide. ICTTD-3 project publishes a newsletter, edited by Prof. Gerrit Uilenberg, assisted by a team of 12 co-editors. The ICTTD-3 Newsletter is published three times a year, and contains the latest information on publications concerning Ticks & TBD. Electronic copies are freely available online, and can be found in the archive section of the ICTTD website. There are five working groups:

1. **Database (THPbase) and GIS (Global Information System):** to create integrated databases for ticks, hosts and pathogens.
2. **Biosystematics Forum:** to discuss, evaluate and recommend changes regarding bio-systematics and molecular phylogeny of Ticks & TB pathogens.
3. **Molecular Diagnostic Network:** novel molecular diagnostic techniques will be used to conduct comparative epidemiological studies on TBD.
4. **Genomics and vaccine design:** proteomics data for Ticks & TB pathogens will be used to design novel vaccines and integrated strategies targeted to ticks & pathogens in order to reduce dependency on chemical control.
5. **Study group on tick-borne zoonoses:** it is the “Veterinary Public Health section” of the consortium, developing a database (MS Access) on zoonotic TB pathogens and TBZ occurring in the Tropics and Subtropics (Latin America, Africa and Asia). Collaboration with other groups/network involved in VPH (e.g. SAPUVETNET II, RED-SPVet, EDEN) is foreseen. The database will be generated through an extensive bibliographic search including unpublished (“hidden”) material. Moreover, the project website ([www.icttd.nl](http://www.icttd.nl)) will act as a resource of information related to Ticks & TB pathogens (Archive/TicksBase /Virtual Tick Museum), and scientists can participate in an on-line forum (discussion groups).
For more information concerning the website, please contact webmaster Hans Nieuwenhuijs: info@icttd.nl

For information concerning the Virtual Tick Museum or TicksBase, please contact Ard Nijhof: ard@icttd.nl

For information on the TBZ data base, please contact Daniele De Meneghi: daniele.demeneghi@unito.it

TOPICS

This section contains topics relating to VPH written by members of the project

ANTIBIOTHERAPY AND VETERINARY PUBLIC HEALTH

Olga Gimeno, Carmelo Ortega, Veterinary Medicine, University of Zaragoza (Spain)

Antibiotics are a useful tool for combating bacterial micro-organisms. Indiscriminate use of these drugs has led to some bacteria developing resistance to antibiotics. The problem is getting worse as the number and types of resistant bacteria increase. The biggest risk is for diseases to emerge which as a result are immune to treatment and regarding Veterinary Public Health in particular for that resistance to be transmitted to humans through the food chain.

It is therefore necessary to put measures in place to stop resistance to antibiotics appearing, developing and being transmitted. These include preventing poor or excessive use of antibiotics so as to slow development of resistant strains which over the past years has led to the concept of a "prudent use of antibiotics" with recommendations for better use.

Others suggest reserving the most effective molecules of some antibiotic groups for human use only to prevent resistant strains in animals affecting humans. Forming surveillance units would also help follow better bacterial sensitivity to antibiotics over time and geographic area.

More research is needed to improve understanding of resistance, including its origins, mechanisms and transmission. Bacteria transmit resistance either vertically (to successive generations of bacteria) or horizontally (via genetic exchange). The latter is more frequent.

Animal food products are thought to be the most common route for transmission to humans, which leads to resistant diseases being transmitted as well as other
bacterial strains in humans developing that same resistance. Other possible transmission routes under investigation are direct contact between humans and animals via micro-organisms such as saprophytes and commensal bacteria, which are easily exchanged between species through contact. The authors believe it is especially important to develop studies on the sensitivity levels of these bacteria as they can be permanently in contact with antibiotics over long periods of time, thus favouring “silent” transmission of resistance to other bacteria.

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THE PROBLEM OF RESIDUES IN ANIMAL FOOD PRODUCTS
Dora Dobusch, University of Salvador, Pilar-Buenos Aires (Argentina)

Residues are compounds which enter animal food products either as the result of poor veterinary practice, after injecting an animal with anabolics, androgen, oestrogen, progestogen or b-agonists, a medicine such as antibiotics, tranquillizers and anti-inflammatories, or as the result of food additives. Although there is legislation regarding the use of food additives, they are frequently the cause of intoxication because they are not controlled when being added to improve appearance, taste and shelf life. Residues in animal food products are an issue for Public Health: for over 30 years chemicals such as pesticides, phthalates, phenolic compounds, aromatic hydrocarbons and polychlorides have been associated to disruption of hormones and to various kinds of cancer. The hundreds of thousands of chemical compounds currently in use are cause for concern. The risk depends on type of compound, dose, application, climate, dissipation time and individual susceptibility.

Antimicrobials administered for controlling pathogens such as 
Salmonella, E. coli and Campylobacter could be replaced by improved animal hygiene and health, which in the short term is problematic, or by probiotics. These contain living micro-organisms which populate the intestines, improving the balance of its microflora and thus resistance to pathogens. Probiotics could be used to stimulate an animal's immune response, activating macrophages and improving levels of Ig A, intestinal metabolic efficiency and energy balance.
In 1994, MERCOSUR countries set up the CREHA plan in Argentina, based on US FDA directives for additives and residues and on recommendations from EU veterinary experts. Over 120 compounds were sampled, focusing on export requirements. However, the internal market is still not regulated enough.

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