# 1987, issue 12 – Abstracts

# EMERGENCE AND SPREADING MECHANISMS OF INFECTIOUS DISEASES (AEEMA meeting of May 21th, 1987, *Alfort*)

#### Introduction

#### Toma (B)

In the first lecture, aimed to specify the frame and the general outlines of the topic of the meeting, the author analyses first the criterions apparently necessary to speak of the emergence of a new disease. Then the three basic components of the continuing evolution, even if at a very low speed, of every disease are put together: the population of the pathogen, the population of the receptive species (one or more), and the environment of this (or these) species.

#### « New » diseases from old bacteria

#### Mollaret (H-H)

After some remarks about the concept of "new disease", the author presents three examples of diseases for which the identification of the specific pathogen, after being orphan during years, or even decades, preceded the description of the specific disease: human infection with *Yersinia enterocolitica*, legionellosis and staphylococcic toxic shock.

#### Kyanasur forest haemorrhagic fever

Rollin (P-E)

After a short historical summary of the observation of the first cases, the author presents the main data about the virus and the clinical signs of the disease in man, as well as its epidemiology. The origin of this new disease is still unknown.

## A.I.D.S.

#### Vachon (F)

The author presents first the history of the apparition of AIDS, as well as clinical, biological and epidemiological data of human infection by the virus of human immunodeficiency. Then hypothesis about the emergence and the development of this disease are proposed. The relationship between human retroviruses and simian retroviruses, the importance of male homosexuality in the United States around 1975 and the use of disposable plastic syringes in developing countries are discussed.

## Appearance of a new swine coronavirus (TGE like) in France

Vannier (P), Jestin (A), Leforban (Y) & Madec (F)

The authors report the facts leading to admit the appearance of a new coronavirus in swine in France. They discuss of the different hypotheses, trying to explain its origin.

# EPIDEMIOLOGICAL SITUATION OF SOME ANIMAL DISEASES IN FRANCE DURING 1986

## Rabies in France and in Europe during 1986

Blancou (J)

The epidemiological situation of rabies in France and in Europe during 1986 is presented from tables, maps and graphs. Some new scientific and technical information's, in the field of epidemiology or control of rabies, are documented.

## Hog cholera and African swine fever in Europe during 1986

Moutou (F)

The situation of Hog cholera and African swine fever, and its evolution, in the E.E.C. countries during 1986 are described and compared those of previous years.

## Pseudo rabies in France during 1986

Toma (B), Lorant (J-M), Bijlenga (G.), Ursache (R), Duée (J-P), Vigouroux (A), Prévost (P), David (C), Rose (R), Eloit (M), Vannier (P) & Maire (C)

The improvement of the epidemiological situation of Aujeszky's disease in France, estimated through the number of clinical outbreaks where the virus has been isolated, was carried on in 1986. The number of outbreaks among the watch animal species which increased until 1983 has ten steadily decreased. In the case of the domestic carnivores: 146 outbreaks in 1983, 100 in 1984; 60 in 1985 and 47 in 1986. For cattle: 44 outbreaks in 1983, 19 in 1984; 11 in 1985 and 7 in 1986. Brittany remains the most infected area.

## Bovine brucellosis in France. Situation during 1986

Eloit (M)

The processing of the information collected through the questionnaires filled every year by the Veterinary Services of each department and sent to the Veterinary Services for Animal Health and Protection (General Direction for Food) gives the opportunity to follow the epidemiological situation of bovine brucellosis in France. This descriptive approach presents the population under survey, the sanitary situation on December the 31st, the results of the survey and of the eradication and prevention campaigns hold during the past year. The main used indicators show an improvement of the situation for 1986.

# Epidemiological situation of enzootic bovine leukosis in France during 1986

## Coton (T)

Available data about control of enzootic bovine leukosis are presented following the sources (sanitary bulletin, annual report of the *Direction Générale de l'Alimentation*, surveys from department veterinary services). The precision of the data about the latently form of the disease is still too low to draw any conclusion, because of the beginning of many local actions.

## The campaign against bovine tuberculosis in France during 1986

## Bénet (J-J)

The observed tendencies of these past years confirm the regular progression of the eradication scheme of bovine tuberculosis in France. In 1986, annual prevalence was 0.73%

and point prevalence on December 31st was 0.38%. The number of marked cattle with a positive test shows a drop of about 30%, compared to the number of last year (9 720 against 14 027). The rate of non-marked cattle with tuberculosis lesions keeps on growing (30%) as well as the rate of marked animals without any visible tuberculosis lesions (69.3%). The geographical distribution shows two main areas: NE and SE of France. The analysis shows that crude data are difficult to proceed for the understanding of the mechanism. However, it can be said that incidence has a higher weight in departments where the situation is favourable, and that disinfecting is less performing in those with a higher prevalence. The rhythm of tuberculisations has a very direct consequence on the performances of the screening methods, by selecting slaughterhouse in the departments with a favourable situation.

# **EPIDEMIOLOGICAL PAPERS**

# **Risk factors and farm diseases: study of correspondence in intensive swine rearing units** Tillon (J-P)

With the help of examples from intensive swine rearing units, the author presents and analyses the notion of risk factors and the way it can be used to control farm diseases.

## Echinococcus multilocularis disease in France: reflexions about its cycle

## Colas (F) & Deiller (M)

*Echinococcus multilocularis* disease is a tapeworm induced disease found in wild and domestic carnivores (primary hosts) and in rodents (intermediate hosts). The parasite meets a free stage when moving from the primary host to the intermediate host. A bibliographical study of the three stages we have tried to point out what would be important to know better. To join this aim, many researches are still to be undertaken, either in the laboratory, either in the field. We have also tried to list and to classify, following their origin, the different possible risks of infection for man. Their relative and absolute importance's are not approach there, but they should be controlled in order to realize a prevention plan against this severe zoonosis. A summary diagram puts together the different possible cycles of the parasite, human infection risks and unknown data of the cycle.