RESOLUTION No. XVIII

Progress in the diagnosis and control of serious poultry diseases: salmonellosis and Gumboro disease

CONSIDERING THAT

A. With respect to salmonellosis

The extent of diagnostic and surveillance activities varies considerably among OIE Member Countries

Salmonella infection in poultry is a world-wide problem, affecting both animal health, particularly the *S. gallinarum-pullorum* group, and public health, particularly at present *S. enteritidis*

Attempts are continuously being made to improve the specificity and rapidity of methods for identifying these organisms

ELISA technology has been adopted for serological monitoring of *S. enteritidis* and *S. typhimurium* but not *S. gallinarum-pullorum*

Extensive antibiotic usage will inevitably result in the development of resistance

B. With respect to Gumboro disease

Diagnostic and epidemiocveillance activities vary considerably among OIE Member Countries

The geographic distribution of Gumboro disease is widespread, and a re-emergence of the acute clinical form has been observed since 1988

The prevalence of the acute and immunosuppressive forms is rarely accurately evaluated, and the viruses responsible for these two forms cannot be distinguished by the standard laboratory diagnostic tests

The absence of known markers to easily characterise very pathogenic viral strains is an important hindrance, preventing their early detection and the application of specific prophylactic measures as soon as they appear

A great variety of vaccination programmes are in use, in particular for young birds, and efficacy of vaccination is difficult to evaluate
THE COMMITTEE

RECOMMENDS THAT

A. With respect to salmonellosis

1. The OIE and WHO should collaborate closely in the diagnosis, prevention and control of salmonellosis of avian origin.

2. Collaboration between the OIE and WHO should concentrate initially on the creation of a panel of control sera against which individual laboratories may standardise and calibrate their assays.

3. ELISA technology be adopted for serological screening of poultry flocks for S. gallinarum-pullorum, in the same way that it has been adopted for S. enteritidis and S. typhimurium.

4. Training courses be set up at a regional level through the relevant international organisations to acquaint field veterinarians with ELISA technology.

5. Antibiotic usage to control Salmonella infections, either alone or in combination with competitive exclusion flora, should be kept to a minimum.

6. Further evaluation be made of the value of vaccination with live vaccines and the characteristics of the immunity produced, as well as the value of competitive exclusion.

7. Based on international guidelines, Veterinary Authorities should provide advice on:
   a) the construction of poultry housing so as to reduce the possibility of environmental contamination and to facilitate cleaning and disinfection
   b) hatchery design, hygiene and Salmonella monitoring
   c) the ways in which contamination of poultry feed can be prevented and/or eliminated
   d) the prevention of carcass contamination in abattoirs.

B. With respect to Gumboro disease

1. In order to increase knowledge of the epidemiology of Gumboro disease
   a) Member Countries should establish systems of diagnosis and epidemiosurveillance aimed at revealing the incidence and prevalence of the acute and immunosuppressive forms of the disease
b) Member Countries should submit infected samples to expert laboratories for the characterisation of the viral strains, encouraging in particular cooperation between countries that are at different levels of development.

2. Research on the very pathogenic strains which have appeared since 1988 should be supported, preferably within the framework of coordinated international programmes, oriented in particular towards

a) the identification of possible viral markers that can be used to characterise different pathotypes of the virus

b) the establishment of specific prophylactic measures.

3. Vaccines against Gumboro disease and/or appropriate vaccination methods be developed, in order to allow more effective vaccination of young birds with maternal immunity.

(Adopted by the International Committee of the OIE on 19 May 1995)