

# REGIONAL APPROACH IN THE PREVENTION AND CONTROL OF RABIES IN NORTH AFRICA AND MIDDLE EAST

**M. Bengoumi<sup>(1)</sup>, R. Mansouri<sup>(1)</sup> & M. Tibbo<sup>(2)</sup>**

(1) FAO subregional Office for North Africa, 43 Rue Kheireddine Pacha, Belvédère, Tunis, Tunisia

(2) FAO regional Office for the Near East, 11 El Eslah El Zerai Street, Dokki, Cairo, Egypt

## BIOGRAPHY

*Dr Mohammed Bengoumi*, Moroccan born in 1962 in Rabat. Veterinary doctor in 1986, he joined the IAV Hassan II as teacher and researcher. He obtained several degrees including a PhD in 1992. He has over 60 publications and 200 scientific communications. He joined the Food and Agriculture Organization of the United Nations (FAO) in 2008 as responsible for animal health and production in the Middle East and North Africa (MENA) region and since 2010 he is the FAO animal production and health Officer for North Africa.

## SUMMARY

Over one century after the first human vaccination against rabies, the disease remains present on all continents and kills tens of thousands people each year, 40% of whom are children under 15 years, mainly in developing countries (Asia and Africa). Although control methods exist, several constraints are impeding eradication of the disease, mainly limited coordination among stakeholders, inadequate communication and awareness of the population at risk, and limited human and financial resources.

This communication focuses on the epidemiological evolution of rabies in the Middle East and North Africa (MENA), and national strategies for the control of the disease. In the MENA region, the disease affects more domestic carnivores (50% of cases) than farm animals (40% of cases). Farm animals are mainly infected by dogs, resulting in economic losses, negative impacts on food security and a risk for farmers, their families and workers in the livestock industry.

In the MENA region, rabies is mainly urban (street rabies), transmitted to humans by free-roaming dogs, the population density of which is highly correlated to the evolution of enzootics and possible epizootic outbreaks. More than 30% of the free-roaming dog population in the region is under the age of one year. The density of the stray dog population is estimated to be between 0.6 and 1.5 /km<sup>2</sup> in urban areas and 1.2 to 2.6/km<sup>2</sup> in peri-urban and rural areas. More than 80% of dog rabies cases occur in rural areas.

In North Africa (Algeria, Libya, Morocco and Tunisia) the average annual number of confirmed cases of human death from rabies is 47 and highly correlated to animal cases with an annual average of 1,442 confirmed cases. In the Middle East, only a few rabies cases are officially declared.

National rabies control strategies include vaccination, control of stray dog populations and raising awareness among the at-risk human populations. These strategies are only partially implemented because of limited human and financial resources and the lack of coordination among all stakeholders in the field. Eliminating rabies requires a coherent and sustainable long-term strategy, backed by robust human and animal health systems.

The regional strategy for the prevention and control of rabies should be based on a participatory approach and coordination of interventions of all stakeholders.

The FAO, in close collaboration with the World Organisation for Animal Health (OIE) and World Health Organization (WHO), supports member states in developing and implementing coordinated strategies among the Ministry of Agriculture, Ministry of Health, the Ministry of Interior, local Authorities, Ministry of Education and NGOs (non-governmental organisations).