

Challenges and achievements in animal rabies diagnosis in low-resource countries: the case of West and Central Africa

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The RESOLAB-AO/AC² rabies subnetwork of twenty-three central veterinary laboratories from West and Central Africa (AO/AC) was launched in 2010, with the aim of filling the gaps in rabies diagnosis and surveillance, through building a solid regional diagnostic capacity and enhanced information-sharing mechanism and policies. RESOLAB-AO/AC national focal points share key information related to laboratory-based surveillance in animals in their countries through quarterly reports and during the annual RESOLAB meetings. From 2012 to 2014, the Food and Agriculture Organization of the United Nations (FAO) supported laboratories by supplying reagents and equipment and organized five national and regional training courses.

Since 2010, the number of laboratories performing animal rabies diagnosis has progressively increased, although the overall number of samples submitted remained low. Poor laboratory performances are mostly attributable to deficient infrastructures, lack of reagents and expertise, as well as to a low diagnostic demand.

Within the context of the Stepwise Approach towards Rabies Elimination, stakeholder consultations have been organized in four Central African countries: Cameroon, Democratic Republic of Congo, Gabon and Republic of Congo. This has greatly advanced timely rabies information sharing across the participants from public/animal health services and civil society in the four countries. The case of the Republic of Congo is an example of what such initiatives can achieve. Thanks to the networking developed during the FAO stakeholder consultation and to the hands-on rabies diagnosis training and support to the animal health laboratory, the first laboratory confirmation of a dog rabies case ever was reported in 2013. These are the first steps in the long road ahead to achieve the freedom from dog-mediated human rabies in Africa set for 2030.

² RESOLAB-AO/CA (*Réseaux des laboratoires de l'Afrique de l'Ouest et Centrale*): Western and Central African Veterinary Laboratory Network for avian influenza and other transboundary diseases. In 2012 the initial network was divided into two subregional areas: a) RESOLAB-Central Africa (RESOLAB-AC), which includes eight CVLs [the CVL of Cameroon, Central African Republic, Chad, the Democratic Republic of Congo (DRC), Equatorial Guinea, Gabon, Republic of Congo and Sao Tome et Principe]; and b) RESOLAB-West Africa (RESOLAB-AO), comprising fifteen CVLs (those from Benin, Bissau Guinea, Burkina Faso, Cape Verde, Ghana, Guinea, Ivory Coast, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal, The Gambia and Togo).