

### *Conclusions and Recommendations*

The conclusions and recommendations issued are summarized as follows:

#### CONCLUSIONS

1. Rabies continues to be a significant public health hazard underestimated in majority of Member countries of the Middle East region. The situation in some countries has worsened due to the emergence of rabies in the region, especially in wildlife, due to deteriorating environment.
2. The progress in preventing human rabies through control of the disease in its animal reservoir has been slow due to technical, intersectoral, organizational, financial obstacles, and lack in the implementation of efficient dog and/or wildlife rabies control campaigns including controlling dog population.
3. As a consequence in a majority of countries of the region the number of post-exposure prophylaxis provided has steadily increased over time. Countries of the Region are spending increasing part of their health budget on procurement of modern rabies vaccines and immunoglobulins to meet the increasing demand for rabies post-exposure treatment. The region as a whole experiences shortage in vaccines and immunoglobulins.
4. Intersectoral sustainable co-operation for rabies surveillance, prevention and control, particularly between the Ministries of Health, Agriculture, Environment, Municipalities, Education and Interior still needs further strengthening.
5. The network of rabies diagnostic laboratories is inadequate to cover territories of all countries. Logistics for the collection and dispatching of samples of suspected humans and animals to diagnostic laboratories need further improvement. National laboratories suffer from inadequate budget allocation and from chronic shortage of essential diagnostic materials and lack of trained personnel;

6. Controlling the disease in its domestic and/or wildlife reservoirs will reduce human rabies and numbers of rabies post-exposure prophylaxis.
7. Through fear of rabies and with the lack of knowledge and resources, some communities in the Region use cruel and ineffective methods of dog depopulation regardless to the pain and suffering caused to the animals.
8. Public health education and awareness are still insufficient to contribute to national rabies control and prevention programmes.
9. Dog and wildlife populations control measures are still carried out with poor planning and lack of monitoring of its consequences.
10. Vaccination of domestic animals remain limited in the Region and insufficient for the control of rabies
11. Lack of reliable data on human and animal rabies impairs perception of the importance of rabies and its control by decision-makers.

## RECOMMENDATIONS

1. The Resolutions and Recommendations of the OIE/WHO/EU International Conference Towards the elimination of Rabies in Eurasia, held in Paris from 27 to 30 May 2007 which has provided information on the control and elimination of rabies and highlighted the need for strong close partnerships among veterinary and public health authorities should be considered and followed by the participants;
2. Comprehensive, sustainable national multisectoral programmes for rabies , surveillance, control and prevention should be planned, funded, implemented and evaluated with the assistance of international agencies.
3. Development of subregional intercountry programmes and networks should be considered.
4. Mid term and long term national strategies should be revised or planned by different sectors with the definition of roles and responsibilities of different sectors involved.

5. Rabies control strategies should focus on the control and elimination of rabies in animals. The strategy should be based on community participation/involvement in all aspects of programme planning and implementation particularly dog vaccination and movement restriction.
6. The capacity of veterinary services should be strengthened and acknowledged by policy makers as an important contribution to the control and eventual elimination of rabies.
7. More efforts should be made to further involve the veterinary sector in the use of modern methods of immunization against rabies and contraception of dog, cat and wildlife for population control.
8. Public awareness and health education on rabies should be a priority as it is an effective preventive measure. Public awareness should be increased by exchange of information, experience and cooperation between medical, veterinary and environmental authorities, it should aim at promoting the participation of individuals and the community in rabies prevention and control activities.
9. Reporting of human and animal rabies (including wildlife rabies) should be improved at all levels. National authorities should maintain or establish an effective mechanism for collating, processing, analysing and disseminating data on rabies, with the technical support of international and regional organisations and utilising existing reporting facilities such as the OIE WAHIS and WHO Rabnet.
10. There is an urgent need to establish a rabies regional reference laboratory in the middle east to improve and facilitate the laboratory based rabies surveillance and monitor the dynamics of the disease in domestic and wildlife animals.
11. Countries should improve their diagnostic facilities, system of shipment of human and animal specimens and ensure prompt communication of concerned medical and veterinary professionals regarding the results of laboratory investigation as per existing WHO and OIE recommended methods.

12. Concerned international organizations should be approached to assist Member states in capacity building in epidemiological surveillance, application of suitable and appropriate diagnostic techniques and evaluation of the national human and animal rabies prevention and control programmes.
13. Funds for the control of rabies should be sought not only from governmental agencies but also from the private sector, national non-governmental organizations and international funding agencies.
14. All countries of the region are invited to participate in the World Rabies Day on 28 September 2008 by raising community awareness. See at [www.worldrabiesday.org](http://www.worldrabiesday.org)
15. During a stray dog control programme in case animal killing is considered, countries should rely on guidelines of international animal welfare organizations and the general principles laid down in the OIE Animal Health Code should be followed with emphasis on using the most practical, rapid and humane methods and ensuring operator safety, considering the circumstances and resources of the countries.
16. The use of immunocontraception should be considered, in conjunction with oral and parenteral rabies vaccination, as complementary tools to reduce the density of dogs and rabies incidence.
17. Improve knowledge of the ecology, behaviour and population parameters of dogs as well as wildlife host populations by involvement of research institutes. The cost-effectiveness of oral vaccination for dog and wildlife should be evaluated.
18. The OIE regional Representation for the Middle East and WHO-MZCP should further strengthen their collaboration to achieve human and animal rabies prevention and control in the Region.