

World Survey of Rabies N^o 34 for the year 1998

Annex 12: Literature References and comments from the questionnaires for the WSR 1998

-
- 2) Santé Animale Mondiale en 1998, Tome 2, Tableaux sur la situation zoosanitaire et les méthodes de prophylaxie des maladies animales, O.I.E, Paris 1999.
 - 3) Regional Seminar on Rabies Prevention and Control, Teheran, Islamic Republic of Iran, 28-30 September 1998
 - 4) Epidemiological Surveillance of Rabies in the Americas, INPPAZ, Buenos Aires, Argentina.
 - 5) Rabies Bulletin Europe 4/98, WHO Collaborating Centre for Rabies Surveillance in Europe, Tübingen 1999.
 - 6) International Meeting on the Epidemiology and Control of Rabies, Southern and Eastern Africa Rabies Group (SEARG)/ World Health Organization (WHO), International Livestock Research Institute (ILRI), Nairobi, Kenya, 4 - 6 March 1997.
 - 7) Country Presentation: India on the Informal Consultation on Regional Strategies for Rabies Elimination, Searo, New Delhi, India, 31 March - 2 April 1998
 - 8) Regional Epidemiology Yearbook 1998 (Asian and Pacific Region), O.I.E, Tokyo, Japan, 1999.
-

Below notes from national reference laboratories were used largely unedited.

Albania	Rabies has been eliminated in Albania since 1976. Despite the fact that Albania is free from rabies, there is an increased tendency of pet owners to vaccinate their dogs and cats against rabies especially in big cities.
Armenia	In the Republic of Armenia during the recent 5 years only one case of rabies was registered in 1996. Vaccines are not imported by the state for vaccination of domestic animals performed by the veterinary service. Within the range of possibility the vaccines are imported in limited quantities by the Ministry of Health stately. Dog vaccination against rabies is only performed in case of having the vaccine.
Australia	It is not possible to discriminate between vaccine used for post-exposure treatment for indigenous bat contact and treatment for contact with rabid animals in overseas countries. However, the majority of the 540 persons who received rabies vaccine did so as a result of potential exposure to the newly identified Australian bat lyssavirus. Please refer to our 1997 return.
Bahamas	This report was developed in collaboration with Dr. E. McPhee, Department of Public Health and the private Veterinary Practitioners of the Bahamas.
Bangladesh	The number of human deaths due to rabies is an approximate figure. The amount of produced and imported human and veterinary rabies vaccines are not given in doses but in ml.
Barbados	Barbados has been rabies free for over 150 years.
Belgium	Dog vaccination is compulsory for dogs from the region south of the rivers Meuse and Sambre and dogs at camping and caravanning places.
Bhutan	Dog vaccination is difficult in legislation enforcement.
Cambodia	All data about rabies concern only the Phnom Penh and Vandac Province region. There exists many more deaths due to rabies infection in Cambodia but data are not available.
Central African Republic	The increase of animal rabies cases and the increase of the number of post-exposure treatments are rather due to the awareness against rabies instead of a real rise of rabies incidence.
China	There were 208 human rabies in China, 208 deaths in 1998. As of the current report system in China, rabies is not classified. Therefore we cannot answer the other questions.
Cook Islands	Rabies has never been reported on Cook Islands.
Cyprus	Dog vaccination is compulsory for imported dogs.
Denmark	40 persons received treatment after exposure outside Denmark. In the 4 cases of rabies in ruminants the identified rabies virus was a bat serotyp EBL-IN. In 1998 only 2 604 out of 4 441 imported antirabies vaccine doses were distributed. Vaccination against rabies is compulsory for dogs and cats traveling abroad.
Finland	Rabies was eliminated in Finland in 1989. There is no compulsory reporting of immunizations in humans but of course for true and suspected cases. Therefore the individual use of vaccine is not known. The vaccine is used for pre-exposure and post-exposure immunizations. The post-exposure treatments mainly after an exposure abroad. Dog vaccination is compulsory for hunting dogs, guide dogs and dogs that are used by the police, the front guards and the army.
French Polynesia	The animal rabies vaccines are only used for dogs and cats going on export.
French Guyana	No death registered in French Guiana due to rabies until now. However in the neighboring Suriname, 7 deaths due to rabies in 1998 (Vampires bats). Therefore measures to inform the population and to vaccinate after vampire bites are reinforced.

Germany	There are no data about animal and human vaccines against rabies in Germany available (no reporting system).
Guam	Rabies has been absent from Guam since 1968. During 1998, 1 person exposed by the bite of a stray dog in Thailand was treated in Guam.
Guyana	Vaccination of cattle against rabies is on-going in Guyana. Bat trapping is on hold due to the absence of protection for field staff against rabies. A national programme to type and isolate virus with PAHO/WHO help is to come on-stream soon.
India	The number of human deaths due to rabies infection is an annual estimate based on information from infectious disease hospitals in different parts of country and the extrapolation of figures from States consistently reporting (West Bengal, Maharashtra, Delhi). The annual average of vaccinations of humans against rabies is higher than 1.1 million.
Indonesia	In Indonesia there are Provinces with endemic rabies and 19 provinces has declared free of rabies such as East Java, Central Java and D.I.Yogyakarta. Flores Island in East Nusa Tenggara Province in 1998 has infected as New Rabies, area.
Ireland	Diagnostic techniques for rabies in humans are not available in Ireland. Vaccination against rabies is compulsory during quarantine and for export to certain countries, otherwise forbidden in Ireland.
Italy	In Italy the last case of rabies in animals has been detected in Friuli Venezia Giulia Region in December 1995, in a fox. Rabies has been eliminated by means of vaccination campaigns conducted in the area at the border between Italy and Austria, Slovenia and in the near Croatia. Urban rabies has been eliminated since the fifties. Though the last case of urban rabies has been reported in Italy in 1973, many people still continue to receive post exposure rabies immunization in case of biting by stray or unknown dogs. The oral vaccination against rabies in wildlife is only carried out in the Friuli Venezia Giulia region. Data given for post-exposure treatment are only provisional and referred only to 11 out of 20 regions. Vaccination is performed only by veterinarians and must be notified to the Veterinary Services of the Local Health Unit and then to the Veterinary Services of the Region. The number of the immunized dogs concerns only data from the Friuli Venezia Giulia region. Dog vaccination against rabies is compulsory in the Friuli Venezia Giulia Region and optional in the other regions of Italy.
Jersey Channel Islands	Rabies has never been recorded in Jersey.
Jordan	Information obtained by analysis of 816 animal bites reported with complete data to our department. Total number of reported cases for 1998 was 1874.
Kenya	The annual incidence of rabies in humans in Kenya is not known. Getting accurate records of human vaccine purchases and usage is also difficult. We know for sure that many human victims of dog bites are vaccinated; but quite frequently the source of the vaccine is the pharmacy whose records are difficult to get. Only one laboratory used to produce the flury strain vaccine in embryonating eggs but not in 1998. Dogs still remain the major source of human rabies infections with about 60-80% of all exposures. The number of dog vaccinations are estimated from vaccine sales. Dog vaccination is only compulsory during vaccination campaigns.
Lebanon	Wildlife is the main permanent reservoir of rabies. Dogs are the main source of exposure for human beings and domestic animals. Lebanon is close to eradicate rabies.
Lesotho	The evidence of rabies in Lesotho has gone down drastically. If the control measures are improved by a positive response we can eradicate rabies in the New Millennium.
Lithuania	In Lithuania rabies was diagnosed in 35 districts in 1998. Most infected districts where Sirvintai, Raseiniai, Salcininkai and Pakruojis. There were 200 000 doses of oral rabies vaccines used in foxes.
Madagascar	Rabies is endemic in Madagascar since 1900. Data on immunization coverage of dogs are unknown, but the estimate number of dogs in the country using a human dog ratio of 10:1 is 1.4 million.
Malawi	Data about human vaccine application are from Central region only. Dog vaccination is compulsory when organized as state campaign.
Malaysia (Peninsular)	Rabies outbreak in 1998 was an incidental outbreak due to 2 possible sources: 1. Dogs were illegally brought in by local people. 2. Rabid dogs crossed Malaysia coming from Thailand's border. Dog vaccination is compulsory in a buffer zone (State bordering Thailand).
Malaysia (Sabah)	The state of Sabah in Malaysia is free from rabies.
Malta	Dog rabies vaccination is carried out only if the animal is going on export.
Mauritius	Rabies has not been reported in Mauritius since 1886. No specific rabies investigations have been carried out. The animal rabies vaccines are only used on request for dogs going on export. Dog vaccination is forbidden except for animals being exported to countries where vaccination is required.
Morocco	A new rabies control strategy is actually under development. It will be established after definitive adoption.
Namibia	No data concerning the source of rabies exposure leading to human death are available at the Ministry of Health and Social Service. Concerning the imported animals vaccine doses we are not able to give a precise figure as a due: 98 200 doses were sold by a Windhoek supplier in 1998 and additional 30 000 doses were bought by Vet. Services from another supplier what makes a total of 128 200 doses. Vaccination coverage in dogs is estimated by multiplying the number of dogs vaccinated by 3 (since each dog has to be vaccinated once every 3 years) and divided by the total

New Zealand Norway	<p>number of dogs (x100). Therefore it is possible to get a figure over 100%.</p> <p>Rabies vaccination is forbidden except for dogs being exported, MAF customs dogs and police dogs. Rabies has never been recorded in mainland Norway, but only diagnosed sporadically since 1980 in the archipelago Svalbard. Although the last case recorded in Svalbard was in 1992, we still consider Svalbard as potentially infected. Many among the vaccinated dogs may have been vaccinated annually in order to be allowed repeated reentry to Norway. The total number of dog vaccination against rabies is estimated to be 250 000-260 000. Dog vaccination is compulsory on Svalbard Island and optional in mainland Norway mainly for cats and dogs before traveling to rabies infected countries.</p>
Pakistan	<p>Data on animal rabies are incomplete. Veterinary Research Institute is currently producing two vaccines: Flury vaccine for dogs and Semple's vaccine for cattle, buffaloes, sheep, goat, equine, dogs etc. In 1998, 59 612 ml of Semple's vaccine were produced and supplied in the field. One dose for cattle/buffaloes/equine is 448ml, injected s.c. for 14 days. The dose for small ruminants sheep and goat is 70ml.</p>
Panama	<p>Bat rabies has been in our country for ever. The first report was in Spanish period. We have installed diagnostic laboratory since 1958. There have been carried out 117 pre-exposure vaccinations for people, which are involved in trapping vampire bats.</p>
Papua New Guinea	<p>There is neither diagnosis nor surveillance of rabies in Papua New Guinea. There are no reports of cases.</p>
Philippines	<p>Available data cannot be disaggregated as to the type of biting animal and which victims were given treatment. Dog vaccination against rabies is compulsory for areas with mass dog vaccinations organized by the local government.</p>
Poland	<p>About 36-40% of animals submitted for laboratory rabies diagnosis were positive in IF test and or Mouse Inoculation test, or TCI.</p>
Portugal	<p>The number of vaccinated dogs is only the number of vaccinations reported to the veterinary service.</p>
Réunion	<p>Dog vaccination is compulsory for all imported animals.</p>
Saint Vincent and the Grenadines Seychelles	<p>Rabies has never been reported on Saint Vincent and the Grenadines. Rabies vaccinations are given to dogs and cats being exported to North America or elsewhere that requests the rabies vaccination. No cases of rabies have ever been recorded in the Republic of Seychelles. Rabies vaccination is not routinely carried out in the Seychelles. The vaccine can only be imported for use in dog or cat, which is being exported to comply with the importing country's requirement.</p>
Singapore	<p>The post exposure treatment of humans is due to exposure outside the country. Rabies vaccination is compulsory for dogs and cats in quarantine, optional for those to be exported and forbidden to dogs and cats in the country.</p>
Slovakia	<p>648 doses out of 1 760 imported embryonating eggs vaccines were produced on human embryo.</p>
South Africa	<p>The number of animal vaccine doses imported and the number of dogs and cats vaccinated will be supplied over RABNET later.</p>
Spain	<p>Rabies only exists in Ceuta and Melilla (North Africa).</p>
Sudan	<p>All data cover the whole country except Southern Sudan. There exists no laboratory confirmation on human death due to rabies infection. The main animal species as origin of exposure to rabies are dogs. Dog vaccination against rabies is compulsory by law but optional in practice.</p>
Sweden	<p>All persons receiving post exposure treatment were exposed outside Sweden and the animal species as the origin of exposure are unknown. The total number of vaccinated dogs is only an approximated figure. Dogs in Sweden are vaccinated by veterinarians, either by private practitioners or by governmentally employed practitioners. Rabies vaccination for animals is only allowed when going abroad.</p>
Turkey	<p>Dog vaccination is compulsory at outbreaks only.</p>
United Kingdom of Great Britain	<p>In the majority of cases, post-exposure treatment resulted from exposure abroad, but a small number of people were treated following exposure to rabies-susceptible animals in the UK, although it was later confirmed that none of these animals was suffering from rabies. Dog vaccination against rabies is forbidden except for animals for export or in quarantine.</p>
United States of America	<p>The veterinary vaccine total is a combined total for doses of neural and tissue culture origine. There is no further breakdown available. Data about human rabies vaccine production and import have not been available until printing of the World Survey of Rabies 1998. Dog vaccination against rabies can be compulsory or optional depending from the state or countries laws.</p>
Vanuatu	<p>Rabies has never been identified in Vanuatu.</p>
Viet Nam	<p>Rabies occurs sporadically in all parts of the country.</p>