# 狂犬病防疫以狗為主,參見黃底文字。



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# GUIDELINES FOR DOG RABIES CONTROL

### NOTE TO READERS

The GUIDELINES are intended for use in countries where plans and services for rables control are being developed, as well as in countries with established rables programmes requiring assessment with regard to management, overall policies and orientation.

Since only minor textual changes have been introduced, recipients of the 1984 version do not need to apply for the revised version of the GUIDELINES.

The preparation and revision of the Guidelines have been coordinated by Dr K. Bögel, Veterinary Public Health Unit, Division of Communicable Discases, World Health Organization, Geneva, Switzerland

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### 1.3 Canine rabies control measures and trends in their application

## 1.3.1 Target animals of control programmes

Measures leading to the elimination of canine rabies reservoirs concern predominantly dogs and to a much lesser extent jackals and cats. In wide areas of the world conditions are favourable for complete elimination of canine rabies. This is particularly true for areas in which reservoirs of this disease in other animal species are absent and the proportion of stray dogs or nonsupervised dogs is low.

Control measures should be applied to canine rabies, irrespective of the presence or absence of rabies reservoirs in wildlife. Where wildlife rabies persists (e.g. in bats, mongooses, skunks, foxes or racoons), sporadic cases of canine rabies may continue to appear. Such spillovers of the infection from wildlife show, however, less tendency to spread within the canine population than outbreaks originating from a canine rabies reservoir. Rabies virus strains show a certain degree of adaptation to the principal reservoir species although this appears never to be absolute.

There may be exceptions to this rule in areas of widespread jackal rabies in Africa. The course of epidemics in eastern African states indicates that jackals easily establish chains of infection with virus strains from canine rabies and that jackals can thus become an integral part with full vector potential in a reservoir of canine rabies. Where such chains of infection, i.e., local epidemics, do occur in jackals, control of rabies in this species is indispensable for canine rabies elimination.

The role of wolves in areas of canine rabies reservoirs is less well understood. In view of the severity and magnitude of wolf bite episodes some countries take preventive measures against rabies in this species.

<u>Felidae spp</u> are more distantly related carnivores of the dog than jackals. This may explain why cats, although closely associated with dogs in urban ecosystems and often infected by rabid dogs, do not play an important role in the maintenance of chains of infection. In general cat rabies disappears as the disease is brought under control in the dog population. However, cats play a significant role as transmitters of rabies from its reservoir in dogs to man. Therefore preventive vaccination and other control measures should be applied to cats wherever possible.

## 1.3.2 Factors influencing epidemics and objectives of rabies control

In addition to the simple species composition of the canine rabies reservoir (see Section 1.3.1), other factors of rabies epidemiology, pathology and immunology favour the control of the disease in dog populations. With few epidemiologically insignificant exceptions, the virus is transmitted directly, the disease is always fatal, chronic cases or asymptomatic carriers do not exist, dog populations do not naturally establish a significant level of immunity, though mass vaccination establishes good protection, and specific diagnosis does not pose any difficulty. The bite and the aggression or paralysis of a dog is sufficient indication for man to react. In all these conditions canine rabies is comparable to smallpox and it is therefore not by accident that both diseases could be eliminated under various socio-economic conditions by applying classical measures reducing contact rates and by mass vaccination.