

Given the circulation of the rabies virus in several areas of Americas, the Pan American Health Organization (PAHO) / World Health Organization (WHO) encourages Member States of the Region to continue intersectoral prevention and control activities aimed at reducing the risk of human cases and also prepare to respond to possible human cases by having post-exposure prophylaxis, human rabies immune globulin and vaccine available.

Situation summary

In the Americas, human rabies transmitted by dogs is in the process of being eliminated. Since the launch of the regional program for the elimination of rabies transmitted by dogs in 1983, there has been a 95% reduction in the number of human cases in the Americas to date.

In recent years, human rabies transmitted by dogs has been detected in Bolivia, Brazil, the Dominican Republic, Guatemala, Haiti and Peru. The most recent cases have been concentrated in the periphery of cities and international border areas and are linked to poverty and unfavorable environments with low canine vaccination rates where the provision of post exposure prophylaxis is a logistical challenge.

Although most cases are reported in a timely manner, the lack of prophylaxis prescription by health care providers to those patients has been a common element of the human rabies cases transmitted by dogs in the Americas between the end of 2013 and to date in 2014.

In addition, in recent years, human rabies transmitted by wildlife has become a public health problem in the Americas. The most significant wildlife reservoirs of rabies in the Americas are the mongoose (as in Cuba and the Dominican Republic), insectivorous and frugivorous bats (as in Chile), and vampire bats (in Brazil, Ecuador and Peru). In the Americas, Brazil, Ecuador and Peru have reported the most cases of human rabies transmitted by wildlife.

Rabies (CIE-10 A82)

Rabies is caused by the rabies virus, which belongs to the *Rhabdoviridae* family, within the *Lyssavirus* genus, which infects domesticated and wild animals, and is transmitted to human beings through rabies infected saliva (through skin and mucous membranes, by bites and scratches).

The incubation period is variable, but usually ranges from 3 to 8 weeks. The first symptoms of rabies may be similar to those of the flu including fever, headache and general weakness. Symptoms then progress to affect the respiratory and digestive tracts and central nervous systems, eventually progressing into complete paralysis, coma and death in all cases.

Once symptoms appear, the disease is almost always fatal. Hence the importance of post exposure prophylaxis with both the vaccine and immune globulin, in accordance to the severity of the situation.

Recommendations

Prevention of human rabies should involve both veterinary and public health services. There are safe and effective vaccines for the prevention of rabies, in animals and in humans, for administration prior to and after of suspected exposures to rabies.

Through this alert, PAHO/WHO reinforces its recommendation to the countries of the Americas to continue immunizing dogs and prepare to respond to possible human rabies cases by having post exposure prophylaxis (rabies vaccine and immune globulin) available for any emergency that occur. As such, PAHO/WHO recommends:

- Carry out mass vaccination of dogs until appropriate and sustainable immunity levels are achieved. This is the most efficient and cost-effective method for the control and elimination of human rabies transmitted by dogs. Vaccination of domestic animals (dogs and cats) has reduced, and even eliminated the occurrence of the disease in some developed and developing countries.
- Raise public and health care worker awareness to have exposed persons seek immediate medical attention and to have proper prescriptions administered by health care services.
- Remind the public and health care workers that cleaning wounds and getting post-exposure vaccinations as soon as possible after contact with an animal suspected of having rabies, can prevent the onset of rabies in virtually 100% of exposures, as recommended by the WHO. Post exposure prophylaxis is not contraindicated for pregnant women, infants, the elderly, and those with any disease.
- Start immediate post exposure treatment for exposed persons; the treatment should only be stopped if the attacking animal shows no signs of rabies while under observation for established periods of time, 10 days in the case of a dog. If the animal is dead, by slaughter or otherwise, it must be tested for the rabies virus; the results should be sent to the veterinary and public health services responsible for the planning and implementation of control activities in the area where the exposure occurred.

PAHO/WHO also reiterates the recommendations made in the 30 August 2010 and 22 December 2011 Epidemiological Alerts on rabies regarding the need to develop strategies to ensure access to pre exposure prophylaxis for persons, based on advanced characterization of areas, considered most at risk of exposure to rabies: for example people who live in or visit rainforests due to the risk of exposure through bat-bites or by other wild animal transmitters of rabies.

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