Rabies kills at least 60,000 people annually. Most of these deaths occur in Africa and Asia and disproportionately more casualties are children. Most rabies deaths are caused by infection with the rabies virus transmitted from domestic dogs, usually through a dog bite.

In a joint statement, the World Veterinary Association and the World Medical Association, say that dog-bite transmitted rabies is a disease of neglected populations, frequently in resource-poor areas. Most of these deaths would be avoidable if more than 70 percent of dogs could be vaccinated and if bite victims would be properly treated through wound washing and timely post-exposure treatment. In short, the requisite tools to control rabies are currently available, however, implementation of these tools is the current and greatest challenge.

However, the search for more preventive tools has not stopped. The next frontier is focused on the development and production of novel therapeutics to neutralize the infective virus in humans and animals. These include:

1. The Rabies immunoglobulins (RIG). RIG has been available for a while now, but its use has often been hampered by stock-out, high costs, and late administration (especially once symptoms occur).

2. Novel diagnostic methods for early detection and confirmation of infection. Mouse model studies of Rabies disease show that the viral infection of nerve cells triggers a process of degeneration identical to that seen in several more common diseases of the nervous system in people.

This opens the possibility for a novel, innovative, inter-disciplinary, and cross-cutting research into the development of tools for early diagnosis, monitoring, and treatment of rabies in humans and animals in a dedicated and collaborative strategy, through the One Health approach that connects the environment to animal and human wellbeing.
WMA President Dr. Heidi Stensmyren said: ‘Appropriately, the theme of this year’s World Rabies Day is ‘One Health, Zero Death’. It is based on the knowledge that to prevent human rabies deaths, a combination of different strategies is needed that includes surveillance and epidemiology, increasing public awareness and risk communication. It also includes educating communities and professionals, enacting supportive legislation, improving dog population management, mass community dog vaccination, pre-and post-exposure prophylaxis, enhancing laboratory diagnostic capability, and establishing, as well as protecting, rabies-free zones.

WVA President Dr. Rafael Laguens said: ‘It is essential to emphasize that, unlike other diseases, humanity already has the necessary tools to eliminate dog-mediated rabies. This deadly zoonosis is entirely preventable, and rabies vaccines for dogs can efficiently eliminate this disease at its animal source’.

This year’s World Rabies Day will continue to highlight and promote these undertakings, with the goal to eliminate dog-bite transmitted rabies by 2030.

The World Veterinary Association and the World Medical Association are confident that these activities, undertaken through a One Health approach and using community health strategies will lead to the eradication of dog-bite transmitted rabies.

http://worldvet.org  https://www.wma.net