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Title: A primer on pre- & postexposure rabies prophylaxis

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Abstract: Human rabies may be prevented by avoiding exposure or application of appropriate prophylaxis after viral exposure. Exposure is defined as any bite, trans-dermal or mucosal contact with infectious material, such as saliva or brain tissue. Preexposure vaccination is provided to those at high risk of exposure, such as veterinary professionals, diagnosticians, animal control staff, wildlife workers, cavers, and certain travelers to areas of high endemicity, in part on the basis of duration of stay, activity and local availability of modern biologics. As long as an individual remains at risk, dependent upon categorical extent, serological surveillance for rabies virus neutralizing antibody should occur routinely, from every 6 months to 2 years. If antibody titers fall below an acceptable level, a single vaccine booster is administered. Regardless of titer, once an exposure occurs, two doses of vaccine, administered on days 0 and 3, provoke a rapid anamnestic response in the previously vaccinated person. For the naïve person, after a thorough risk assessment (encompassing information on the biting animal, its availability, the circumstances of the event, etc.), wound care, infiltration of rabies immune globulin and administration of cell culture vaccines, form the hallmark of postexposure prophylaxis. Survivorship is virtually assured when prophylaxis is both timely and in keeping with public health recommendations. Over the next five years, many realistic expectations from a global perspective in the field are anticipated, including: new purified, sub-unit and recombinant vaccines; the first licensed monoclonal antibodies; more simplified immunization schedules; alternative tests for vaccine potency; and emerging producers and markets, particularly in Asia.