The relative wealth of the population in the United States supports the ownership of pets. Although dogs, cats, and fish are the most common pets in the United States, exotic animals are often highly sought after, and their ownership has seen a recent resurgence.

In 2003, more than 50 cases of monkey pox were reported across the United States by owners of exotic pets such as prairie dogs. In the June 2003 issue of Cutis®, a case of rat mite dermatitis acquired from pet hamsters was reported. Contagion from animals is common around the world, but Americans are lulled into a false sense of security by the availability of good veterinary care and enforced vaccination for rabies. Furthermore, outbreaks of turtle-derived salmonellosis and monkey-derived slow viral infections are contained or prevented from occurring in the United States by laws limiting the private ownership of such pets. Limitations on the importation of foreign meats protect the United States from mad cow outbreaks. However, there is still a wide array of infectious diseases that can be spread from contact with both exotic and ordinary household pets and that practitioners should keep in mind when examining pet owners.

While bite-related infections with Pasteurella multocida are still the primary risk of dog ownership, other pathogens can be derived from both dogs and cats. Although Trichophyton tonsurans is the leading pathogen in tinea capitis in the United States, cases of Wood’s light fluorescent Microsporum species still occur and may be caught from young kittens in the household. Fleas and ticks are not completely eliminated by protective collars, and practitioners should consider them as a possible source when patients present with papular urticaria or inflammatory nodules with central punctae. Cat scratch fever still affects young owners of cats, and exposure to dog or cat feces has been associated with development of cutaneous larva migrans. Furthermore, pregnant women still must avoid young cats, which can carry Listeria monocytogenes and Toxoplasma gondii.

For owners of rodents (eg, mice, squirrels, hamsters, prairie dogs), monkey pox is the current public health crisis, yet bubonic plague remains the most dangerous disease potentially acquired from these creatures. Rat-bite fever, infection with Streptobacillus moniliformis, is still problematic for persons scratched by or bitten by rats, mice, or hamsters. For persons who own or live near deer, the deer tick carries Lyme disease and ehrlichiosis. For fish lovers, Mycobacterium marinum has been acquired from fish tanks and should be considered in the proper clinical setting. For cow owners, Trichophyton verrucosum infections, cutaneous anthrax, brucellosis, and tularemia are potential risks.

As more exotic animals become household pets, new and renewed infectious diseases will emerge periodically. Recognition of the source and containment of the specific animal population allows for reduction in morbidity and mortality associated with these conditions. As with any epidemic, the limited entry of infected species into the country and quarantine of animals already in the country become key to containment of infection. However, it is the job of the dermatologist to identify these exotic illnesses and stem their spread. Keep your eyes open!

REFERENCES