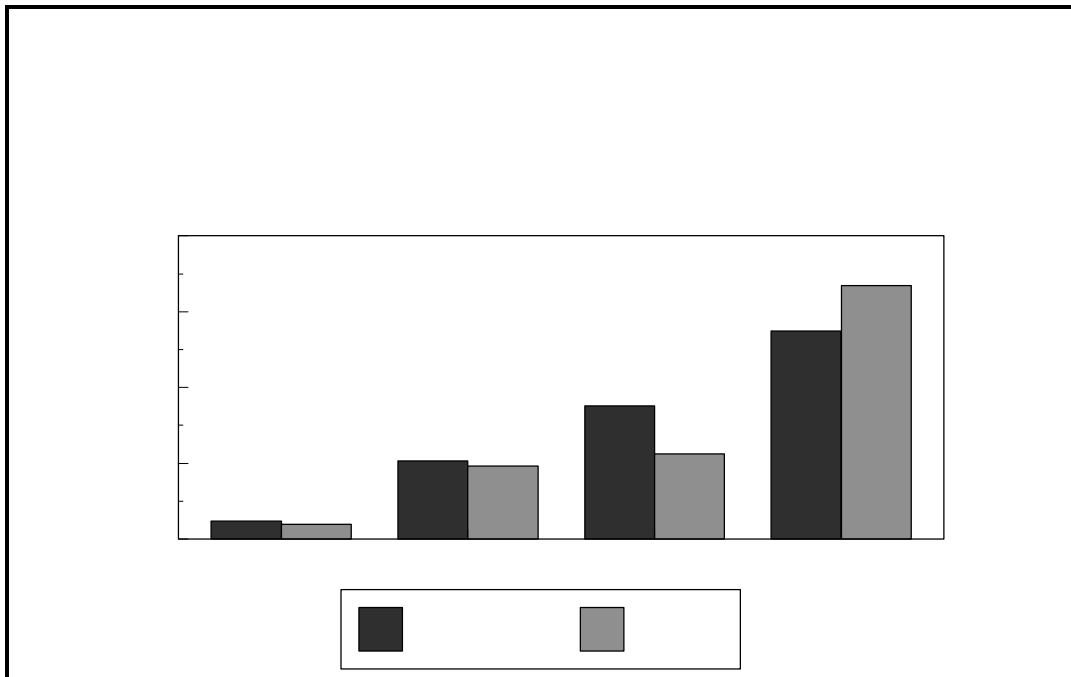


In 1990 and 1991 there were two distinct rabies epizootics occurring in New York State. Raccoon rabies from the mid-Atlantic states and red fox rabies from Canada affected a significant portion of the state. These two epizootics continued in full force in 1992; however, the red fox epizootic waned in early 1993 as was expected. The disease is still being reported in fox populations in adjacent areas of Quebec and Vermont.

The annual number of animal rabies cases in New York State has fluctuated since 1925, the point in time when these data was first recorded. Historically, the previous highest number of animals diagnosed as being rabid in any one year occurred in 1946 when 1,175 animals tested positive for rabies. With the advent of vaccine for dogs, this number gradually decreased. In 1992, the Department of Health tested 8,997 specimens and confirmed 1,761 cases of rabies in animals. This number represents the largest single-state, one year total in the U.S. The 1,761 confirmed rabid animals reflects an increase of 71 percent from the 1991 total and an 18-fold increase over the average confirmed cases in the past five years. As the rabies epizootic spreads across the state, the number of rabid animals has increased as has the number of people who require treatment.



In 1993, the need for rabies testing exceeded the 1992 levels, primarily due to the first human fatality confirmed to be caused by rabies in almost 40 years. The Department of Health examined specimens and confirmed that 2,747 animal were rabid, a 56 percent increase over 1992. A vast majority, 97.4 percent, of the year's animal rabies cases were associated with the raccoon rabies outbreak. During 1993, 13 more counties were affected by raccoon rabies bringing the number of affected counties to 49. The disease continues to spread through the wildlife population at the rate of 25-40 miles per year.

The first human death in New York State since 1954 occurred during summer 1993. Rabies was not initially suspected as the cause in an 11 year old Sullivan County girl. A formalin-preserved sample was submitted for rabies testing only after a hospital pathologist saw suspicious particles upon routine postmortem microscopic examination weeks later. The child had no history of a bite from a rabies-suspect animal, but genetic analysis performed at CDC identified the responsible strain of rabies virus as one that is commonly isolated from a migratory species of bat, the silver-haired bat.

Among the 4,417 domestic animals tested in 1993, 78 (1.8%) were rabid. Cats accounted for 48 (62%) of those cases. Other rabid domestic animals included 18 cattle, seven dogs, four horses, one pig and one goat. The much greater incidence of rabies in cats than in dogs in 1992 and 1993 is consistent with the trend observed throughout the areas affected by the mid-Atlantic raccoon rabies outbreak.

Among those who received the primary series of postexposure treatment in both 1992 and 1993 were veterinarians and veterinary staff, reinforcing the need for people in high-risk occupations to take universal precautions against rabies exposure and to receive pre-exposure immunization.

FOX

Of the 102 rabid foxes statewide in 1992, 73 were red foxes from the counties of Clinton, Essex and Franklin where the Canadian red fox rabies strain has been prevalent since mid-1990. In 1993, this outbreak waned to five red foxes with no further reported cases after April of that year. Fox rabies cases, however, continue to be reported in adjacent areas of Vermont and Quebec. This is the first time red fox rabies has been reported in the central Adirondacks.

RACCOONS

In 1992, 1,358 raccoons were confirmed rabid from 36 counties in New York State. In 1993, this number rose to 2,365 rabid raccoons from 49 counties with 837 (35%) from Albany County. The raccoon rabies epizootic continued to spread north, reaching beyond the Mohawk Valley into the southern Adirondacks and approaching the Niagara frontier. The metropolitan areas of Buffalo and Rochester appear to be threatened.

BAT

In both 1992 and 1993, bat rabies continued to exist statewide with 61 confirmed cases in 1992 and 57 in 1993. The 1992 bat rabies cases were found in 32 counties; 28 counties were affected in 1993. Big brown bats account for a majority of the bats examined and also those found to be rabid. Rabies was confirmed in little brown bats, hoary bats and silver-haired bats.

Aside from the death of the 11 year old girl in Sullivan County attributed to a bite from a silver-haired bat, in 1993, a Texas farmer died from a bat strain of rabies virus. Since 1980, of 19 human rabies cases in North America, eight were from exposure to dog rabies in areas of the world where rabies is still endemic in those animals. Of the remaining 11 cases, eight were attributable to exposure to a strain of rabies virus associated with bats. Five of those were associated with a strain that is commonly isolated from rabies infected silver-haired bats, a species rarely encountered by humans.

Although raccoons account for the largest proportion of rabies cases in New York State, bats constitute an important risk of human mortality. While in 1992, 14 people were treated for

exposure to a rabid bat, the number of people treated for a bat exposure in 1993 was 189.

DEER

Rabies was confirmed in 20 deer in the state during 1993, including 18 white-tail deer and two captive Sika deer (farm-bred for meat). In 1991 three and in 1992 five deer were diagnosed as positive. The percent of positive deer when compared to number tested, however, remains fairly constant over the three years.



| YEAR | NUMBER TESTED | NUMBER POSITIVE | PERCENT POSITIVE |
|------|---------------|-----------------|------------------|
| 1991 | 72 | 3 | 4.2 |
| 1992 | 78 | 5 | 6.4 |
| 1993 | 291 | 20 | 6.2 |

All of the specimens tested were from areas in the state where raccoon rabies was occurring. Of the 291 deer submitted in 1993, only 272 were suitable for testing and had a report of the circumstances of capture. Of this number, 76 deer were reported by the submitter of demonstrating some signs of illness suggestive of rabies. Of these 76 deer, 18 were diagnosed as rabid. There were no rabid deer among the 196 that were submitted after routine hunter-initiated contact or captured in other circumstances that did not suggest abnormal behavior in the deer.