

## **MALARIA IN NEW YORK CITY**

During summer 1993, three New York City residents without recent travel histories of bloodborne exposures were diagnosed with malaria, due to *Plasmodium falciparum*. Although it is not unusual to have 20-40 case reports of malaria submitted annually to the department, most of these are imported cases, primarily of infection with *Plasmodium vivax*. Migrant farm workers, students or residents of countries where malaria is indigenous may arrive in the United States where fulminant symptoms develop and lead to diagnosis. In this episode, all three cases lived in the same neighborhood and had onsets of illness within a day of each other. These three *P. falciparum* infections were acquired in New York City, and were likely acquired from the bites of infected *Anopheles* mosquitoes. Unfortunately, the case reports had been received and case investigations begun at a time in late summer when mosquito populations were quite low. No evidence of *Plasmodium* infection of the local mosquito population was detected. Further case surveillance and mosquito surveillance efforts will continue.

## **EASTERN EQUINE ENCEPHALITIS**

Extensive virus surveillance activities continued by county and state health agencies in central New York State where epizootic eastern equine encephalitis (EEE) virus activity occurred in 1990 and 1991. This virus appears to cycle in nature depending upon the susceptibility of the natural hosts and reservoirs of the virus. It is possible that the large epizootic that occurred in 1990-91 may have resulted in viral immunity in the primary natural hosts, which may wane over subsequent years, giving rise to host populations with increasing susceptibility and eventual recurrent epizootic potential. Despite the testing of more than 65,000 primary and 96,000 secondary vector mosquito species in 1992, and more than 212,000 mosquitoes tested in 1993, evidence of EEE virus was not detected in central New York State. Isolations of Highlands J virus, an arthropod-borne virus closely related to EEE, yet nonpathogenic to humans, were detected in 77 pools of mosquitoes collected in central New York and Long Island. For the first time in many years, EEE virus was detected in six pools of mosquitoes collected in Suffolk County. Mosquito control operations were not initiated in response to these isolations due to seasonal timing and low populations of mosquitoes.