

**Medical Director's Report
Board of Health
March 2010**

Summary of Arthropod-borne Diseases 2009

Arthropod-borne diseases are those conveyed by mosquitoes and ticks. West Nile virus is a mosquito-borne disease and in 2009 we had the lowest number of cases since the virus was first detected in 1999. There were seven human cases and no deaths. Surveillance for the presence of this virus continues to be surveying mosquito pools. In the past, birds have also been submitted that were found dead. This no longer is felt to be necessary.

Another mosquito-borne disease is equine encephalitis. This disease killed one human in Oswego and infected seven horses and one white-tailed deer. Equine encephalitis became more prevalent in 2003 after it reappeared in that year with an intervening period from 1992 of being relatively free of it in New York State. The human death this year was the third on record for New York State and the first in an adult. The other two cases were in children – one a five week old child in Oswego County and the other a seven year old child in Onondaga County. All three cases were fatal. Prevention of this disease stems usually on monitoring virus in mosquito pools and treating high-risk pools with mosquito insecticide.

Of the tick-borne diseases, there were 3,800 cases of Lyme Disease in 2009, although it's felt that this is not a complete reporting yet for all of the activity of '09. Lyme Disease has been reported in all 57 upstate counties. Expansion of it along the Hudson River continues with substantial increases in the counties bordering Essex County. No particular changes were noted for Tompkins County.

Zostavax

Reviewed draft policy on use of Zostavax. This is an attenuated live-virus vaccine intended to prevent shingles in adults. Shingles is a very painful rash that occurs at any age. The vaccine though is licensed only for people 60 years of age and older and is most effective in individuals in the younger part of that age span. Although Zoster (shingles) can affect adolescence, younger children, and young and middle aged adults, there is no licensed vaccine for use there.

The major issue is the pain of Zoster and the duration of the rash. It's a particularly long-lived rash, often lasting three months; although not all that period the rash is as acute as it is in the very beginning. However, there is a certain incidence of severe pain with it and pain that can even last longer than the acute rash lasts. Sometimes up to years. People get Zoster from the chickenpox they had earlier in life. The virus remains dormant in their bodies after acquisition in child or young adulthood and then erupts out along a particular sensory nerve to cause Zoster later in their life when their immunity, for some reason, wanes and allows the virus to replicate. The vaccine is intended to boost immunity and reduce the chance of outbreak.