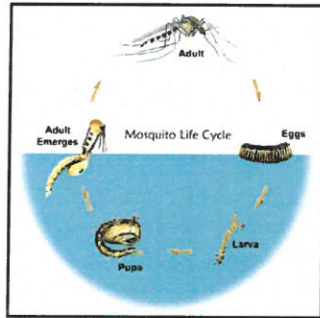


Does mosquito spraying endanger our health or the environment?

Once the adult mosquito insecticide spray dissipates, it breaks down quickly in the environment and produces miniscule residual. Multiple scientific studies have shown that the risk to humans and the environment from exposures to ultra-low volume applications used for mosquito management are negligible. All public health insecticides used in NJ are registered federally by the EPA and locally by the NJ DEP. EPA only approves pesticide registrations after extensive testing for efficacy and human and environmental safety. All insecticide applicators are highly-trained professionals and are licensed through the NJDEP to apply pesticides to control mosquito populations. When ULV applications are done correctly, no impacts on non-targets (including honey bees) or species diversity are found. Additionally, it has been found that the risk of mosquito-borne virus is much higher than the risk posed by adult mosquito control efforts.



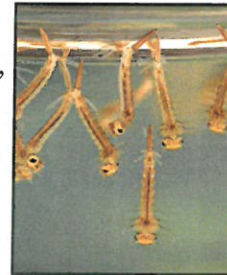
Are mosquito spray programs even effective?

Yes, studies have shown ultra-low volume spray applications are very effective at lowering mosquito populations and reducing the risk of human exposure to mosquito-borne diseases. Professional mosquito control would not continue to use this technology if it was not effective. The WCMCC routinely compares mosquito populations before and after ULV spraying is done to ensure it remains effective.

Aren't there better ways to manage mosquitoes?

Yes, it is called IPM, Integrated Pest Management, but you may also hear it referred to as Integrated Vector Management and Integrated Mosquito Management. IPM reduces mosquito populations to acceptable levels through the use of environmentally and economically-sound practices. Insecticides are only a small part of this approach. **This is what we do!**

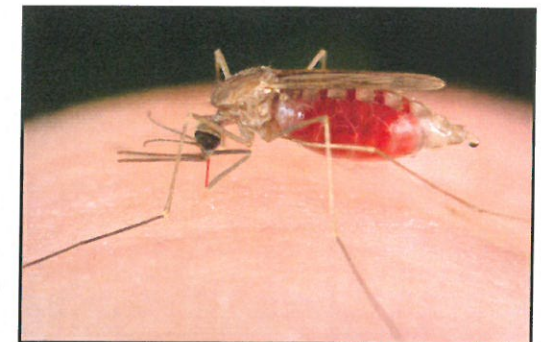
The Commission relies heavily on scientific facts and all control decisions are based on surveillance. Rainfall surveillance, habitat surveillance, larval mosquito surveillance, adult mosquito surveillance, and mosquito-borne disease surveillance are all taken into consideration. Our integrated approach includes a public education program, a water management program (including source reduction), a biological control program, a larvicide control program, an adult mosquito control program, and insecticide resistance testing. There are 45 species of mosquitoes in Warren County and they don't all bite people; therefore, it is important for all mosquito collections to be identified to species. Mosquito species that do not bite people or transmit disease to people or animals are left alone to contribute to the food web.



For the ones that do pose a threat, the Commission aims to control them in the larval stage. Larval control makes up the vast majority of our work. During the larval stage, the mosquitoes are easier to locate and are concentrated. There are many more options available to control larval mosquitoes and it is much more efficient to control mosquitoes at this stage. Source reduction, water management, and biocontrol are the first lines of defense. If none of those options are possible, then biorational larvicides are used, like *Bti* (*Bacillus thuringiensis* subs. *israelensis*). Despite our best efforts, adult mosquito control is sometimes necessary to control high nuisance populations and/or when mosquitoes test positive for mosquito-borne disease.

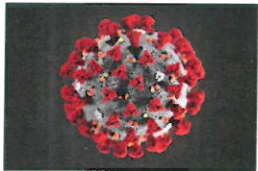
Warren County Mosquito Control Commission

FAQ's About COVID-19 & Mosquito Control



Can mosquitoes transmit Covid-19?

No, it is highly unlikely. Only certain viruses that have evolved with mosquitoes can be transmitted by them. COVID-19 is a respiratory illness spread primarily through viral droplets released when someone coughs or sneezes. A female mosquito



would first have to bite a person infected with COVID-19, and then the virus would have to replicate inside the mosquito and pass

through the salivary glands during the next bloodmeal. Coronaviruses, including COVID-19, cannot replicate inside the mosquitoes; therefore, the mosquito cannot pass it along to its next victim.

Does mosquito spraying make COVID-19 worse?

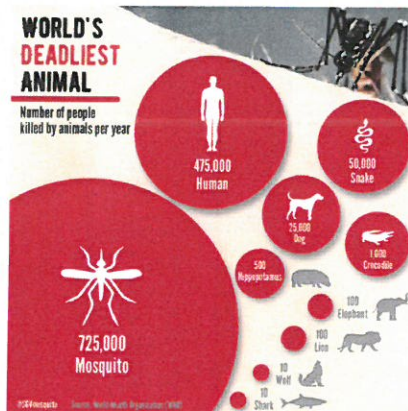
No, there is no evidence showing that spraying for mosquito control has any effect on COVID-19 infections. However, there is evidence that limiting or stopping mosquito control operations during a

public health emergency or natural disaster can have detrimental effects on a population.



Is mosquito control even necessary?

Mosquito-borne diseases are among the leading causes of death and illness today. Mosquitoes kill about 725,000 people each year. Due to organized mosquito control in the United States, the threat of mosquito-borne disease is much less than in other parts of the world; however, many of these diseases still pose a significant threat to the public health. West Nile virus, eastern equine encephalitis, Lacrosse encephalitis, Jamestown Canyon virus, and St. Louis encephalitis are continually monitored throughout NJ.



In times of special concern, other viruses, such as Zika virus, Dengue virus, and Chikungunya are added. It has been stated by the Centers for

Disease Control that mosquito bites can impact health, even in the absence of any pathogenic organism. County mosquito control is mandated by law in New Jersey under the Health Statutes and as a result, mosquitoes and mosquito-borne diseases are well controlled in this state. The mission of the Warren County Mosquito Control Commission (WCMCC) is to control mosquito populations that present a disease/and or nuisance threat, thereby protecting the health and welfare of the residents of this county.

What is mosquito spraying?

Usually when people talk about “mosquito spraying” they are referring to truck-mounted spray operations used for controlling adult mosquitoes. This type of spraying has evolved over the years from fogging to misting and more recently, to ultra-low volume spray (ULV) technology. ULV equipment is precisely calibrated to deliver an extremely small amount of insecticide over a large area (for example, less than 2 ounces per acre). The droplets formed by the ultra-low volume



sprayer are designed to impinge on mosquitoes during flight; hence, this is why adult mosquito control is performed during dusk/dawn hours when mosquito activity is highest and other beneficial insect activity is lowest. Adult mosquito spraying is the last line of defense and is only performed when other efforts have failed and nuisance populations are high or mosquito-borne disease is present in the mosquito population.

For more information please visit our website @ www.warrencountymosquito.org