

Why Control Mosquitoes?

Annoyance/ Recreation –

If there are fewer mosquitoes, citizens are more



comfortable, and therefore spend more time outdoors. Quality of life will be improved for citizens by being able to walk, golf, bike, and watch children's activities, etc, without mosquito annoyance. Often nothing is done to control mosquitoes and a community just has to suffer from mosquito infestations.

Disease – The diseases transmitted by mosquitoes are responsible for illness in both people and animals – These diseases can be responsible for a variety of symptoms, from people just feeling a little under the weather to permanent (health related) damage and even death. Most people will recover from mosquito-borne diseases but medical costs can be significant and recuperation time can be long and stressful to both patient and family. Children are more likely to spend time outside in the summer when they are not in school, and children and seniors are often more susceptible to these diseases.

Tourism - When mosquito populations are excessive people will be less likely to visit recreation areas or to spend time outdoors. This can cause businesses in these areas to

lose revenue. Where the threat of mosquito disease is prevalent people are more likely to avoid an area.

Worker comfort - Many of our citizens have occupations that require them to spend time outside, jobs such as: construction, landscaping, recreation, road repair, maintenance, and others. High mosquito populations can cause loss of productivity.

How to Control Mosquitoes

IMM/IPM or Integrated Mosquito Management/Integrated Pest Management involves the use of all appropriate and economical strategies to manage pests and their damage to acceptable levels with the least disruption to the environment. The following are strategies used when following an IMM/IPM system:

Surveillance – Routine surveillance of mosquito habitat, populations, and diseases.

Education – Informing citizens about the mosquito life cycle and mosquitoes' need for water will help reduce artificial habitat. Communication with citizens also provides an opportunity to educate them



about mosquito avoidance and appropriate protective clothing. Citizens could also be informed regarding choices of effective repellents like those containing DEET or Picaridin which could be used during peak mosquito activity.

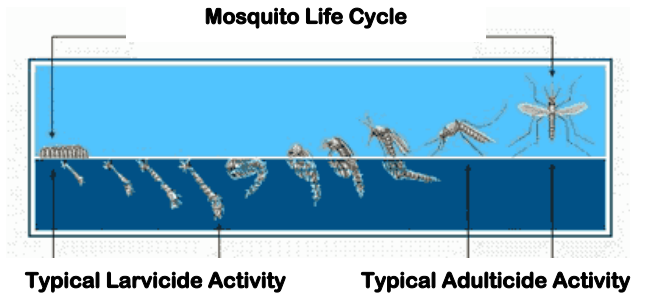
Source Reduction – Elimination of areas that hold water and provide mosquito habitat can have permanent results in eliminating mosquitoes from an area.

Mosquito Control – Use of Environmental Protection Agency (EPA) labeled insecticides, both biological and chemical, to control all stages of mosquitoes while minimizing effects on the environment. All insecticide applications must be made by Michigan Department of Agriculture licensed applicators.

Why an Organized Mosquito Control Program?

Accountability - Monitor results and efficacy - With an organized mosquito control program an IPM system can be run efficiently. There will be records of mosquito populations, disease monitoring, and a record keeping system to note which insecticides were used during treatment. Without an organized program many citizens will do their own treatment, quite possibly over-treatment and there will be no record of applications. Often a home owner will treat their yard even without verification of a problem. Without the

knowledge of lifecycle and habitat, a product may be used on the wrong stage with little or no results, which leads to a waste of time, money, and possibly an unnecessary use of a pesticide.



Monitor mosquito populations and disease potential – the primary purpose of mosquito control is that of disease prevention. In order to monitor disease transmission potential, surveillance, and testing of mosquitoes, birds, other animals must take place. When a given area shows increased incidence of disease positive mosquito pools or birds, citizens may be at higher risk for disease transmission. Targeting these areas with mosquito control practices would help reduce the risk of human transmission.

An organized plan for control over large areas is more effective - Since mosquitoes can easily have a flight distance of a mile or more, control of mosquitoes in one yard will only give temporary relief at best, as mosquitoes will just migrate from untreated bordering properties. Township or county-wide programs can effectively treat the larger areas affording longer and more efficient protection to citizens.

Expertise in field –When a person or a business is dedicated to a specific job/area they are able to build knowledge over time and network with other professionals. In this way the control program would not have to start at the beginning every year, but would have the knowledge base firmly in place. These applicators would gain knowledge of the best product to be used in a given situation as well as familiarity with historic habitat in an area. Licensed/certified applicators would be handling the insecticides with knowledge of mixing rates and safety protocol, which would increase confidence from the citizens.



Funding

The four county-wide programs in the state of Michigan are funded through millages. These millages range from .34 to .65 mills and raise from \$825,000. to \$2.5 million. There are also several township programs that are funded by a millage. When millages for these programs are up for renewal – approval rates of 75% or greater have been achieved.

This brochure is only an introduction to why communities should consider controlling mosquitoes. For more

information please check the Michigan Mosquito Control Association (MMCA) web site at: www.mimosq.org.




Links to additional organizations and information can be found by clicking the Links button. Phone numbers for any of our board members are listed on the Board Members page. Feel free to contact the MMCA with any questions you may have. Our email address is: info@mimosq.org. MMCA can provide speakers if a community would like to learn more about mosquito control. MMCA also hosts an annual convention in February.

MMCA is a non-profit organization, consisting of members from government, industry, and academia, dedicated to the health and safety of the people of Michigan. We encourage the use of a fully Integrated Mosquito Management system resulting in responsible reduction of disease carrying mosquitoes. MMCA is a

source of information regarding controlling mosquitoes, and does not provide any kind of mosquito control services.

MMCA is a sustaining member of the American Mosquito Control Association and a partner in the EPA's Pesticide Environmental Stewardship Program (PESP).





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Controlling Mosquitoes and Mosquito Control



The Why's and How's of Controlling Mosquitoes in Michigan

Prepared by the Michigan Mosquito Control Association