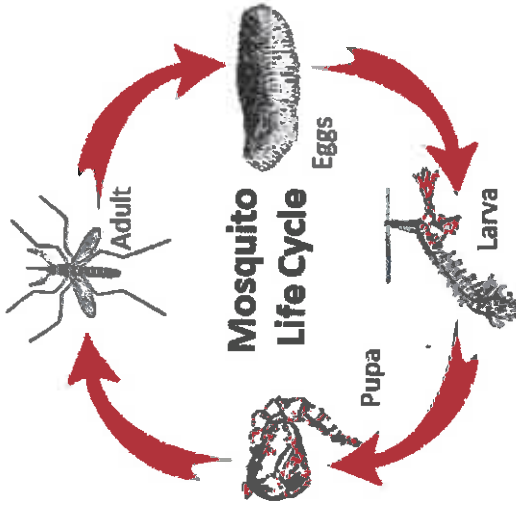


Life Cycle



ADULT: World wide there are 2,700 species of mosquitoes. In Massachusetts, there are 52 species of mosquitoes. Not every species bites or transmits diseases. Females need blood to produce eggs. Males only feed on nectar.

EGGS: Females lay eggs in a variety of ways. Some are laid in a raft on the surface of stagnant water. While others eggs are laid on the edges of drying puddles.

LARVA: Larvae feed on organic material in the water. They go through four distinct growth stages called instars. In the heat of the summer, they can go from egg to adult in a week.

PUPA: Inside the pupal case, the larva transforms into an adult. The stage typically lasts 1-3 days.

Diseases

Mosquito borne diseases have long plagued humanity. Unfortunately, modern times are no different. Globally, mosquito borne diseases kill 1 million people annually. Most of these deaths are from malaria.

In Massachusetts the primary mosquito borne diseases are Eastern Equine Encephalitis (EEE) and West Nile.

EASTERN EQUINE ENCEPHALITIS VIRUS (EEEV): On average, there are 10 human cases of EEE in the U.S. each year. Historically, Massachusetts is one of the most active states for EEEV. The majority of human cases in the state have occurred in Plymouth and Norfolk counties. The virus cycle is complex and involves several different species of mosquitoes. Residents can best protect themselves by following personal protection methods such as using repellents and avoiding outdoor activity from dusk until dawn.

WEST NILE VIRUS (WNV): The mosquitoes responsible for WNV are associated with human activity. The larvae live in containers and polluted water. It is important for homeowners to inspect their properties for any objects holding water. West Nile Virus activity is usually highest in dry years when there is more stagnant water.

As part of our WNV program Plymouth County Mosquito Control Project (PCMCP) treats over 45,000 catch basins annually.

Services

PCMCP provides services to the residents of Plymouth County and Cohasset.

SOURCE REDUCTION: Eliminating stagnant water reduces mosquito populations. Under certain circumstances, PCMCP will maintain existing ditches to improve water movement. We also have a tire removal program.



SURVEILLANCE: PCMCP participates in the disease surveillance program run by the Dept. of Public Health. We submit mosquitoes for disease testing. Test results are then used to issue guidance to PCMCP and municipalities.

LARVAL MOSQUITO CONTROL: Larval control reduces mosquitoes in neighborhoods. PCMCP has mapped over 3,500 sites where mosquito larvae may be found. We treat over 12,500 acres annually. If you have standing water, give us a call.

ADULT MOSQUITO CONTROL: PCMCP accepts requests for adult mosquito control from residents by phone. Applications are made via a truck mounted ultra-low volume sprayer. The Project also adulticides per request of municipalities for public health concerns.

Personal Protection

REPELLANTS: Repellants are a powerful tool in the prevention of mosquito borne diseases. Make sure to follow all labeled instructions on the product you purchase. When selecting a repellent use only active ingredients registered by the EPA and are also recommended by the Center for Disease Control (see below).

1. DEET (Chemical Name: N,N-diethyl-m-toluamide or N,N-diethyl-3-methylbenzamide)
 2. Picaridin (KBR 3023, Chemical Name: 2-(2-hydroxyethyl)-1-piperidinecarboxylic acid 1-methylpropyl ester)
 3. Oil of Lemon Eucalyptus or PMD (Chemical Name: para-Menthane-3,8-diol) the synthesized version of oil of lemon eucalyptus
 4. IR3535 (Chemical Name: 3-[N-Butyl-N-acetyl]-aminopropionic acid, ethyl ester)
- Other actions you can take include; avoid outdoor activity from dusk to dawn, wear long sleeves and pants (when temperatures allow), and fix window screens.

More information about repellants and disease activity can be found at Massachusetts Dept. of Public Health's website and our website.

www.PlymouthMosquito.org

Source Reduction



DRAIN IT, DUMP IT, CLEAN IT UP

1. Keep gutters clean
2. Put away buckets and garbage cans
3. Remove tires (contact us)
4. Drain excess water from pots and saucers
5. Change water in birdbaths once a week
6. Maintain pools and artificial ponds
7. Put away toys or turn upside down
8. Call PCMCP for natural water bodies

MOSQUITO HABITAT: Habitat for immature mosquitoes is created when standing water occurs for a week or more. Eliminating stagnant water reduces adult mosquitoes, disease risk and pesticide use. Take steps to ensure that objects such as boats, tarps, tires etc. are not holding water. If there is naturally occurring stagnant water on your property, contact us.

[Plymouth County Mosquito Control Project](http://PlymouthCountyMosquitoControlProject.org)

2018

Protect Yourself



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