

Creating a Mosquito Control Policy

According to the Centers for Disease Control and Prevention (CDC), *“Illnesses from mosquito, tick, and flea bites have tripled in the U.S., with more than 640,000 cases reported during the 13 years from 2004 through 2016. Nine new germs spread by mosquitoes and ticks were discovered or introduced into the United States during this time.”* (CDC, 2018). The introduction of new pathogens and increase of illness indicates that, now more than ever, comprehensive mosquito control programs are crucial. that comprehensive mosquito control programs are more important than ever. An important part of any mosquito control program is the policy that provides authority and guidance for programmatic activities.

Policies help to provide regulatory structure, guidance, and authorization to activities that make up mosquito control programs. Creating a comprehensive policy is often done together with response plans to ensure they reflect the same goals and actions and that the policy accurately describes achievable actions. Policy development, along with response planning, can also include building understanding and support for, developing and providing justification for action levels and related activities, stakeholder involvement, and ensuring decision makers have the information they need to support the policy.

Outlined below are the key areas to consider including in a mosquito control policy. At the end of the page are examples of existing mosquito control policies, to utilize as references in creating a policy that works for your jurisdictions. Since good policies start with good planning, key activities to undertake prior to policy development are also outlined.

Pre- Policy:

Prior to developing a mosquito control policy, ensure that you:

- Have a comprehensive understanding of the mosquito species in your area, including public health threats, surveillance and control methods
- Identify community’s concerns through public outreach initiatives
- Understand commonly applied action levels for mosquito and disease prevalence
- Have a community communication plan to support the proposed policy
- Meet with stakeholders to ensure the proposed policy is realistically achievable and address any limiting factors that could inhibit successful implementation
- Have the support of your organization’s leadership
- Have response plan developed or in development – link response plan to policy or include them together
- Review with legal team to ensure regulatory compliance

Common Policy Sections

Overview:

The overview section should name the jurisdiction given authority to control mosquitoes, the regulatory entities that approved the policies, the source that provided input and guidance to those recommendations, and an overview the method(s) utilized, such as Vector Index (VI) for West Nile Virus. Overview sections may be replaced with regulatory language.

Mosquito Larva Surveillance and Control

Controlling mosquito larva is a critical component in controlling mosquito populations. This portion of the policy should identify how the jurisdiction conducts mosquito larva surveillance, what time of year surveillance is done, what the thresholds for action are, what action is taken, and the source of information for these policies, if available. Since most larvicides aren't considered hazardous to wildlife or groundwater, this section is often omitted from policies and included only in department procedures and response plans.

Adult Mosquito Surveillance and Control

Adult mosquito control is species dependent, so it is important that this segment accurately reflect established methods to control the species of mosquito(s) in the jurisdiction. If there are nuisance (non-disease carrying) mosquitos in the jurisdiction, they should be identified along with any related control (or non-control) policy. This element of the policy should address how the jurisdiction conducts adult mosquito surveillance and control, what time of year surveillance is done, what the thresholds for action are, and the source of information for those policies.

Pesticide Spraying Activities for Adult Mosquito

The utilization of pesticides to control mosquitos varies across the country. Jurisdictions may choose not to utilize spraying unless there is a public health risk, but for many areas, spraying plays an essential role in minimizing the spread of disease. This part of the policy should identify how the jurisdiction utilizes pesticides, and the source of information for those policies. This includes terminology and methods such as: EPA approved or licensed, CDC guidance, recognized practice and standard for adult mosquito control, ultra-low volume (ULV) application of pesticide, etc.

Adult Mosquito Control to Protect Public Health from Mosquito-Borne Disease

Disease surveillance of trapped mosquitos plays a crucial role in predicting threats to public health. While emerging diseases, such as Zika and Chikungunya might not be present in levels that are easily detectable in the mosquito populations, the rate of diseases such as West Nile Virus and Western Equine Encephalitis present in mosquitos can set in motion a more aggressive mosquito control plan. This section should outline action levels when mosquito control activities may be increased or changed due to threats to human health.

Exclusions of Property from Adult Mosquito Control Spraying

If a jurisdiction allows for exclusion of spraying, a section should be added to communicate the availability of the program and where to find exclusion procedure information.