

Cole County's Integrated Pest Management Policy

It shall be the policy of the Cole County Health Department (CCHD) and Cole County Public Works (CCPW) to follow the guidelines listed in this policy, where practical, to effectively control the spread of Vector-Borne disease, specifically those transmitted predominantly by mosquitoes, including West Nile Virus (WNV).

During the months of April through September, CCHD shall monitor surveillance data of reported cases of Vector-Borne disease. This surveillance data shall consist of current and prior reported human and animal cases in a geographic area of the county. Prior or current of positive pools of infected mosquitoes shall also be tracked.

The Risk Category shall be established by the second workday of each week by CCHD during the months of April through September each year, based on CCHD staff recommendations and available surveillance data. The Vector-Borne disease risk designations consist of four categories outlined in the table below.

Also included in the table are the integrated pest management intervention methods that include public education, integrated vector management, and habitat reduction. The response guidelines in this policy were developed using the Centers for Disease Control and Prevention, Division of Vector-Borne Diseases publication 4th Revision, Dated June 14th, 2013, "**West Nile Virus in the United States: Guidelines for Surveillance, Prevention, and Control**".

Recommendations for a phased response to Vector-Borne disease surveillance data.

| Risk category | Probability of human outbreak | Definition | Recommended activities and responses Responsible Agency = ¹ Cole County Health ² Cole County Public Works |
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| 0 | None | No adult mosquito biting activity (vector species). | <ul style="list-style-type: none"> • Develop and review Vector-Borne disease response plan. ^{1 & 2} • Review mosquito control program. ^{1 & 2} • Identify source reduction projects (Standing Water in Catchment Basins and Ditches). ² • Secure surveillance and control resources necessary to enable emergency response. ^{1 & 2} • Review and update community outreach and public education programs. ¹ |
| 1 | Low | Complaints of biting adult mosquitoes. -or- History in prior years of Positive WNV or Vector-Borne disease in mosquito population in a specific geographic area. -or- Current infection of WNV or Vector-Borne disease activity in birds or mosquitoes. | <ul style="list-style-type: none"> • Response as in category 0, plus: • Conduct integrated pest management program to monitor and reduce vector mosquito abundance, including the use of Larvicides. ^{1 & 2} • Inspection to identify areas where habitat reduction may accomplish effective population control. ^{1 & 2} • Use of insecticides for adult mosquito population control where at least two of the risk category 1 definitions are present for a specific geographic area. Spray area shall be determined to achieve an application that will reduce the adult biting population for that geographic area. ² • Conduct environmental surveillance to monitor virus activity. ¹ • Initiate community outreach and public education programs focused on personal protection and residential source reduction. ^{1 & 2} |

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| 2 | High | <p>Sustained transmission activity in mosquitoes or birds.</p> <p>-or-</p> <p>Horse cases reported.</p> <p>-or-</p> <p>Human case or blood donor reported.</p> | <ul style="list-style-type: none"> • Response as in category 1 plus: Intensify and expand adult mosquito control in areas using ground and/or aerial applications where surveillance indicates human risk. ^{1&2} • Intensify visible activities in community to increase attention to Vector-Borne disease transmission risk and personal protection measures. ^{1&2} • Work with collaborators to address high-risk populations. ¹ • Intensify and expand surveillance for human cases. ¹ |
| 3 | Outbreak in progress | <p>Conditions favor continued transmission to humans (i.e., persistent high infection rate in mosquitoes, continued bird mortality, seasonal mosquito population decreases not anticipated for weeks)</p> <p>-Or-</p> <p>Multiple confirmed human cases or positive blood donors.</p> | <ul style="list-style-type: none"> • Response as in category 2, plus: • Intensify emergency adult mosquito control program repeating applications as necessary to achieve adequate control. Monitor effectiveness of vector control efforts. ^{1&2} • Emphasize urgency of personal protection, including use of repellents, through community leaders and media. ^{1&2} • Secure funding for emergency response from all available sources to maintain prevention and control efforts. ^{1&2} |