To: General Public  
From: David Theuret, M.S.  
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Regarding: Transmission of COVID-19 by Ticks and Mosquitoes

As we enter tick and mosquito season, some may have questions about the role these pests play in the transmission of COVID-19. To date, there is no evidence that ticks and mosquitoes can transmit COVID-19. According to information provided to the Entomological Society of America (ESA) by the U.S. Centers for Disease Control and Prevention’s Division of Vector-Borne Diseases “Mosquitoes and ticks can’t spread all types of viruses. At this time, we have no data to suggest that COVID-19 or other similar coronaviruses (e.g. SARS, MERS) are spread by mosquitoes or ticks.” The World Health Organization (WHO) has shared similar information: “To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes.”

Mosquitoes and ticks can cause other debilitating diseases. Therefore, when enjoying outdoor activities in accordance with social distancing guidelines please remember to take steps to reduce mosquito and tick bites.

Use an Environmental Protection Agency (EPA) approved repellent that contains active ingredients such as DEET, Picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), Para-menthane-diol (PMD), or 2-undecanone. The product formulation and active ingredient will offer varying lengths of protection against different pests. Use the EPA Find the Repellent that is Right for You search tool (https://www.epa.gov/insect-repellents/find-repellent-right-you) to identify approved products. When using repellent products, always follow the label instructions.

Considerations for repellents:

(1) Do not spray repellent under clothing, or on cuts, wounds, or irritated skin
(2) If using sunscreen and insect repellent, apply sunscreen first and then repellent
(3) Do not apply repellents directly to the face - spray into hands and then rub onto face, avoiding the eyes and mouth
(4) Reapply repellent only as directed on the label
(5) A parent or guardian should apply repellent to a child. Do not use products containing OLE or PMD on children younger than three years old
(6) Wash treated skin and clothes with soap and water after returning indoors
Wear long-sleeved shirts, pants, and closed-toe shoes when outdoors. Tuck pants into socks, and shirts into pants. Treating clothing with Permethrin or purchasing Permethrin-treated clothing is an additional preventative measure that can repel and kill mosquitoes and ticks. Remember to **always follow the label instructions**. Permethrin products meant for treating clothing should not be applied when the clothing is being worn.

**Additional steps to help prevent mosquito bites include:**

1. Ensure that window and door screens are in good condition.
2. Reduce outdoor activity when and where mosquito biting activity is high.
3. Remove or drain standing water sources around the home that mosquitoes use to develop.
4. Treat water sources that cannot be removed or drained with approved larvicidal products (e.g., Bti) meant to kill immature mosquitoes. When using insecticidal products, **always follow the label instructions**.

**Additional steps to help prevent tick bites include:**

1. Walk in the center of trails. Avoid wooded areas with high grass and leaf litter.
2. Perform tick checks after returning indoors (even from your own backyard). This can be done in the shower, which has the potential benefit of washing off unattached ticks.
3. Remove ticks promptly. To remove a tick, use a pair of forceps or tweezers to grab the tick as close to the skin surface as possible and pull with steady pressure upwards. Wash the wound with soap and water or alcohol ([https://www.cdc.gov/ticks/pdfs/FS_TickBite-508.pdf](https://www.cdc.gov/ticks/pdfs/FS_TickBite-508.pdf)).
4. Examine clothing and pets for ticks upon returning indoors.
   a. Tumble-dry clothing on high heat for 10 minutes to kill ticks. Additional time may be needed for damp clothing. If clothes require washing first, hot water is recommended.
   b. Work with your veterinarian to determine the best tick prevention products for your pet.
5. Reduce tick habitat around your home (e.g., remove leaf litter, keep grass short, reduce shade when possible).

Using pesticides labeled for homeowners to control ticks and mosquitoes should be done in accordance with the pesticide label. Alternatively, pesticide treatments can be performed by licensed pest management professionals.


**Preventing mosquito and tick bites:** [https://www.cdc.gov/ncezid/dvbd/about/prevent-bites.html](https://www.cdc.gov/ncezid/dvbd/about/prevent-bites.html)


**Controlling ticks around the home:** [https://www.cdc.gov/ticks/avoid/in_the_yard.html](https://www.cdc.gov/ticks/avoid/in_the_yard.html)