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Stemming the Rising Tide of Human-Biting Ticks and Tickborne Diseases, United States

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DOI: <https://doi.org/10.3201/eid2610.201271>

To the Editor: We agree with Eisen (1) that local/county vector control agencies (VCAs) are well-positioned to address tickborne disease prevention.

However, addressing tickborne diseases using VCAs requires substantial long-term support from local administrators and taxpayers and would necessitate changing the way vector control programs are currently funded to a more proactive approach.

Sustainable funding is critical because ticks rebound quickly when management efforts cease (2). Many VCA budgets are eroded in the years between mosquito-borne disease outbreaks, leaving them ill-prepared for the next outbreak (3). Consequently, tickborne disease programs could experience major setbacks if their resources are redirected during a mosquito-borne disease outbreak.

Eisen acknowledges (1) that known barriers to implementation of community-based tick control include a lack of optimized best practices for tick suppression that link reductions in tick populations to measurable reductions in human disease, as well as the lack of real-world cost estimates for their implementation. Tickborne disease programs without proper budgets and realistic expectations that purport to reduce incidence but fail to do so (or fail to do so quickly) run the risk of undermining public trust and willingness to sustain funding.

Last, we caution that managing ticks in residential situations (as opposed to high-risk public open spaces and trails) is fraught with technical and public relations challenges, legal issues, and likely insurmountable funding demands (4,5). The complex array of environmental and social factors contributing to the increase in tickborne disease cases (e.g., forest management practices, climate change, land use, and an aging population) is frankly beyond the scope of any individual VCA to address without higher-level (state and federal) coordination.

A proactive approach with higher-level coordination will help manage tickborne disease. To give VCAs the best chance to combat tickborne disease, they must be adequately and sustainably funded to manage mosquitoes and ticks, even during years of fiscal challenge.

Acknowledgment

We thank Victoria Thompson for comments on this manuscript.

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Rhabdomyolysis as Potential Late Complication Associated with COVID-19

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DOI: <https://doi.org/10.3201/eid2610.202225>

To the Editor: Jin and Tong described a patient with severe coronavirus disease (COVID-19) in whom rhabdomyolysis developed on day 9 of hospitalization (1). The interplay between severe acute respiratory syndrome coronavirus 2 and rhabdomyolysis is not yet understood; we consider possible etiologies for this case of rhabdomyolysis.

We reported 2 case-patients with COVID-19 who also had weakness and elevated creatinine kinase levels (but no respiratory symptoms) (2). As part of his COVID-19 treatment regimen, the patient reported by Jin and Tong received lopinavir and meropenem, which can cause rhabdomyolysis (3,4). Meropenem is associated with rhabdomyolysis by inducing severe hypomagnesemia and hypokalemia; it would be helpful to know the trends in the patient's electrolytes before rhabdomyolysis developed (3). A cytokine storm might also have caused this complication because rhabdomyolysis developed on day 15 of COVID-19 symptoms and coincided with the peak of inflammatory markers (C-reactive protein). On the other hand, the combination of hypoxia and hypercoagulability might have induced an ischemic event that inhibited blood flow to the involved muscles, triggering rhabdomyolysis.

Clinicians treating rhabdomyolysis concurrent with COVID-19 must assess the many differential diagnoses, including severe acute respiratory syndrome coronavirus 2–induced myositis, reactions to medication, cytokine storm, hypoxia, or a thromboembolic event. This differential diagnosis is crucial because each condition has a distinct therapeutic approach.

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