

The Flint Legionnaires' disease outbreaks: *Questions Raised*

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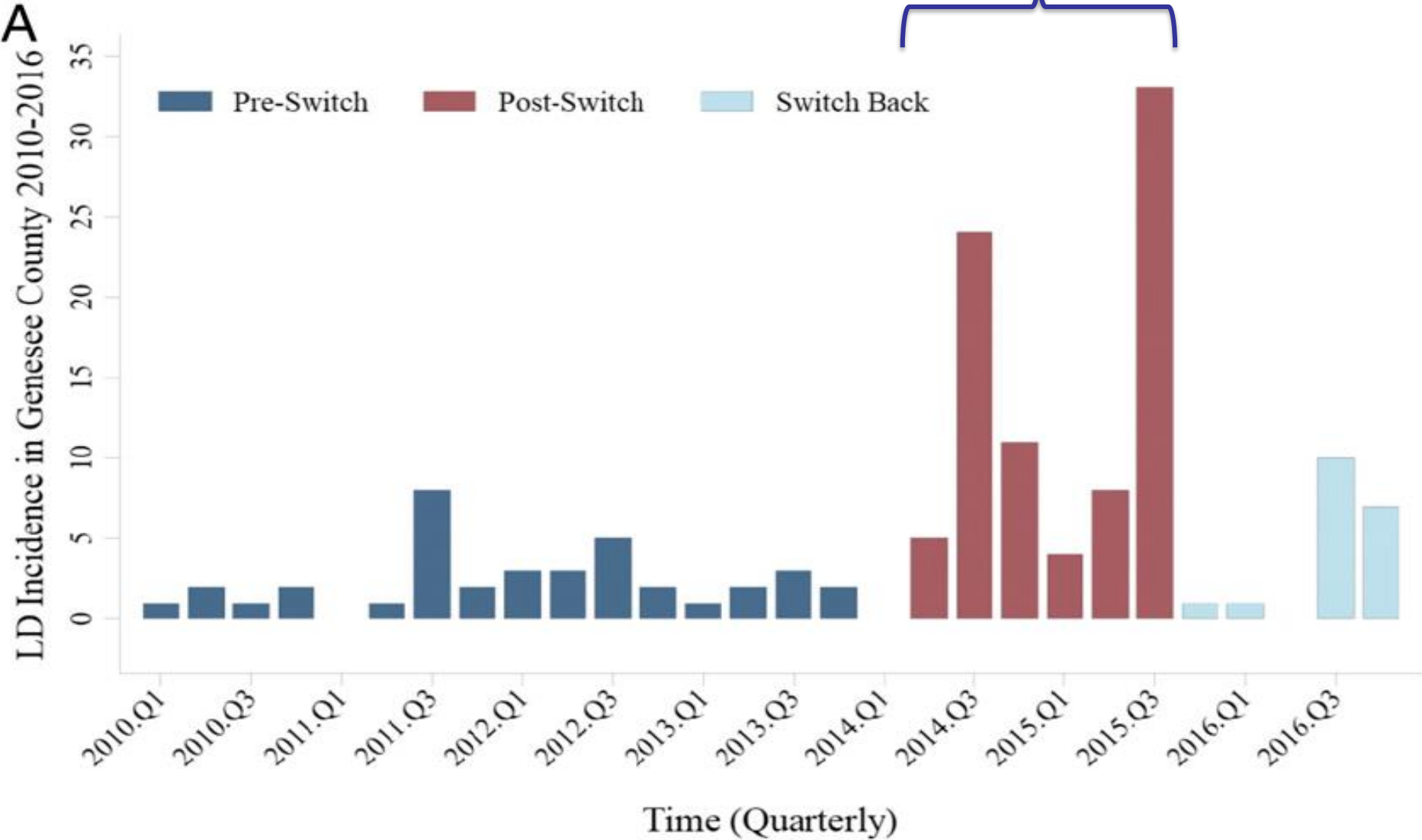
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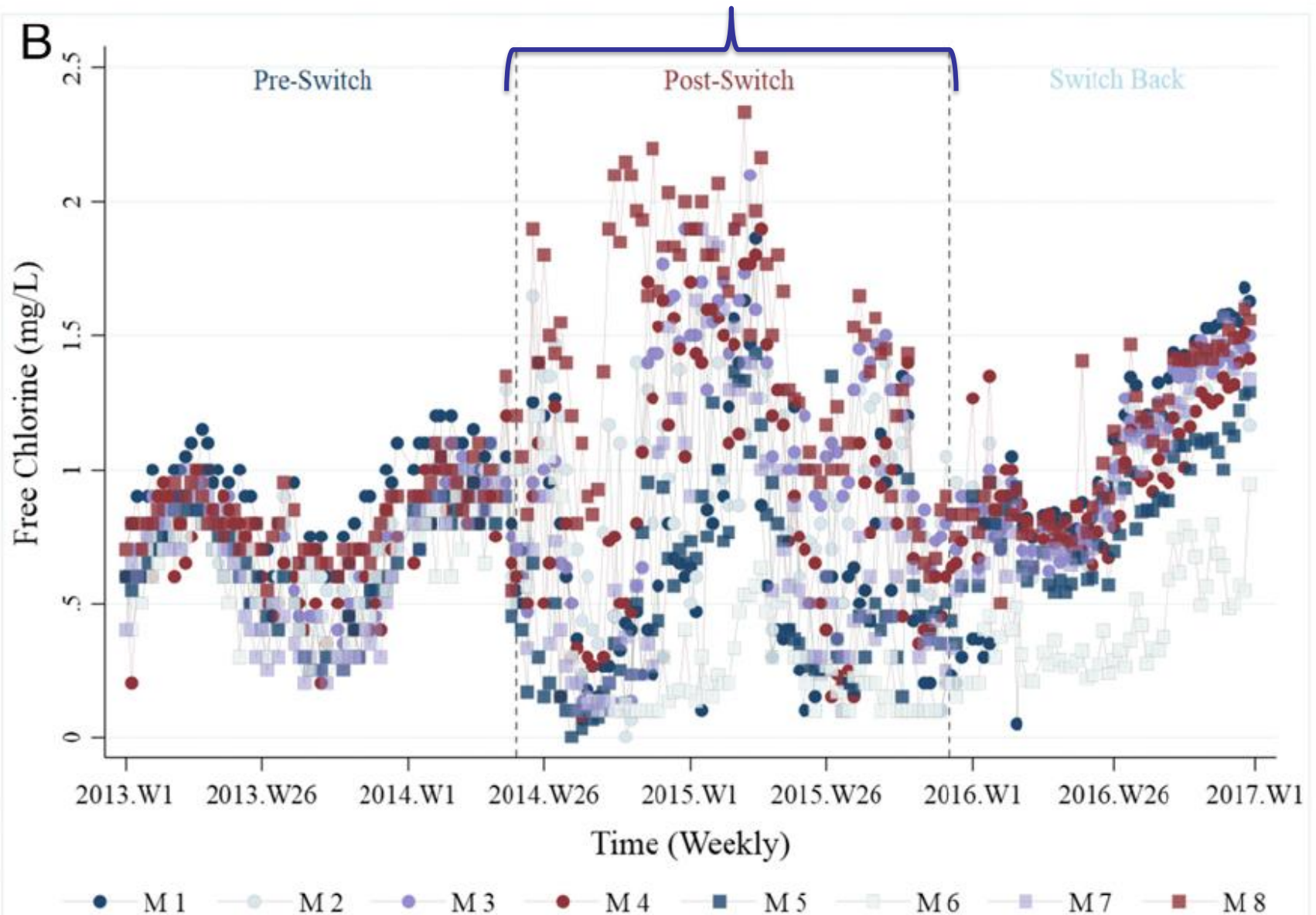


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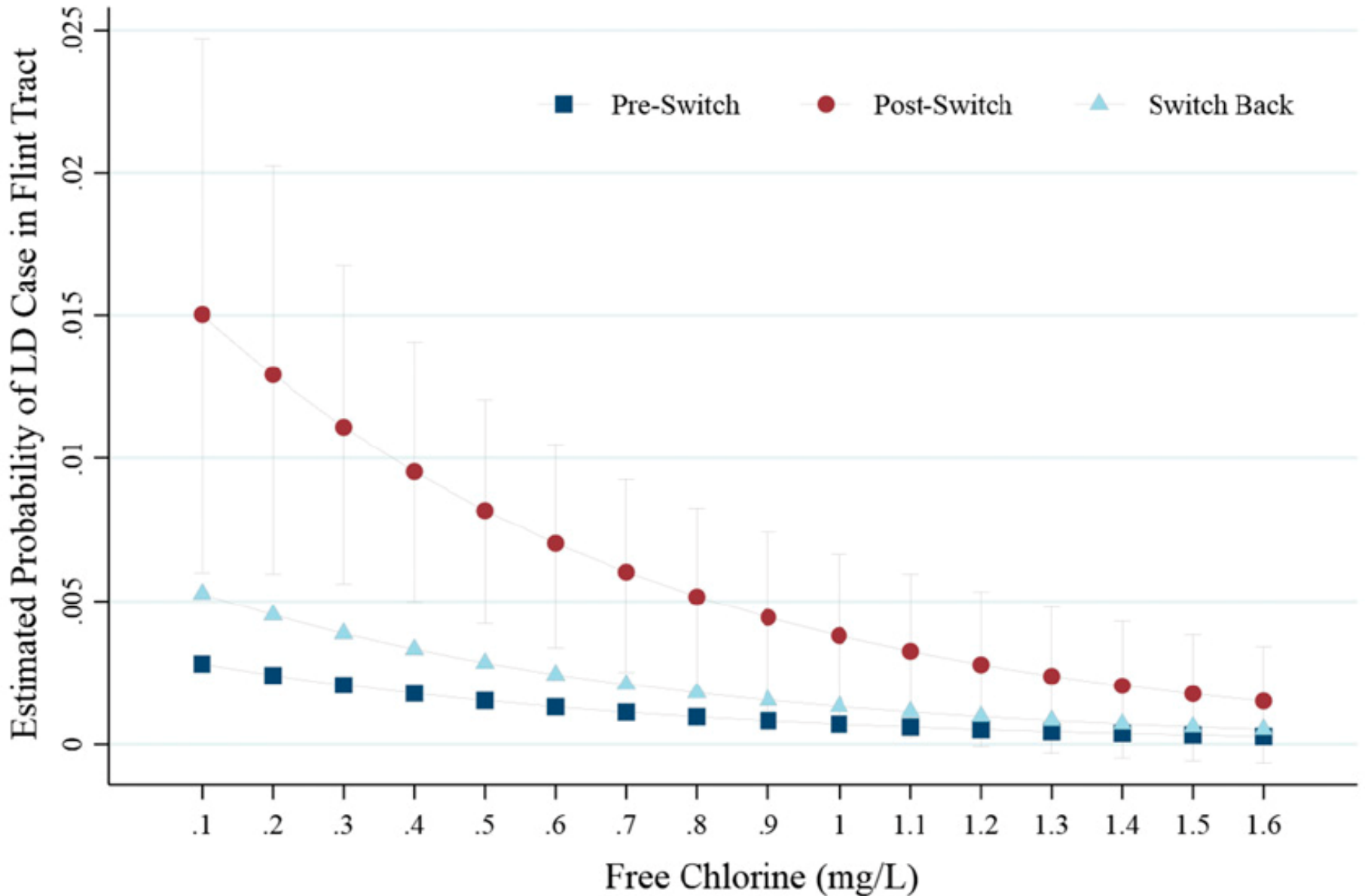
Flint outbreak coincided with water source switch from Lake Huron to Flint River



Free chlorine variability coincided with water source switch from Lake Huron to Flint River



As free chlorine increased in a census tract, its probability of having an LD case decreased



Assessment of the Legionnaires' disease outbreak in Flint, Michigan

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- Can chlorine residual reports improve disease risk assessment tools?
 - Did the altered water chemistry in Flint also promote *Legionella* growth?
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Prevalence of Infection-Competent Serogroup 6 *Legionella pneumophila* within Premise Plumbing in Southeast Michigan

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- Do serogroup 6 strains of *L. pneumophila* survive in water aerosols?
- How many Legionnaires' disease outbreaks and sporadic cases are masked by the lack of diagnostic testing for serogroup 6 *L. pneumophila*?