

Wastewater Monitoring of *Cyclospora* during a National Outbreak

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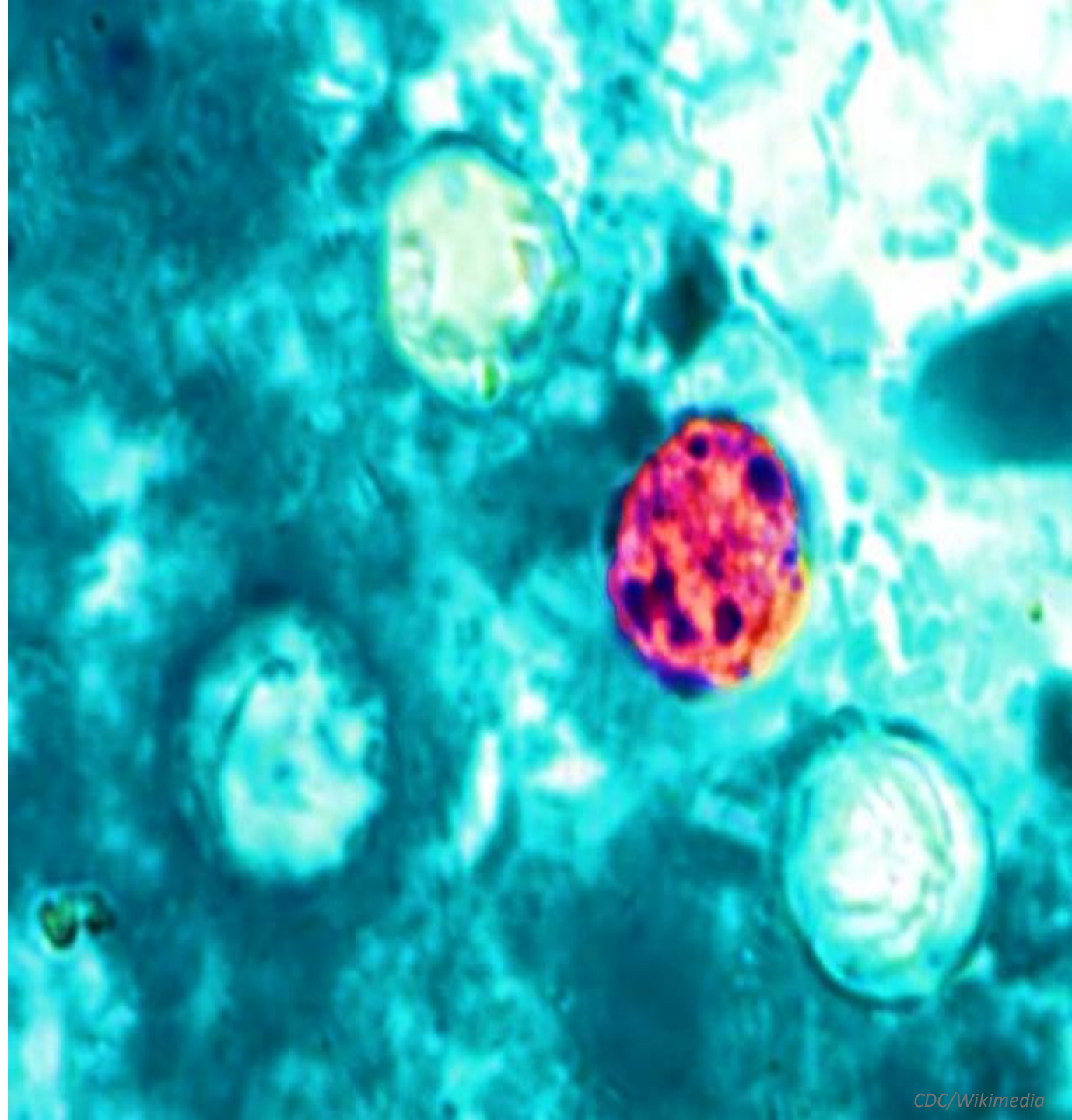
Water and Environmental Health Laboratory (WEHL)

Department of Fisheries and Wildlife

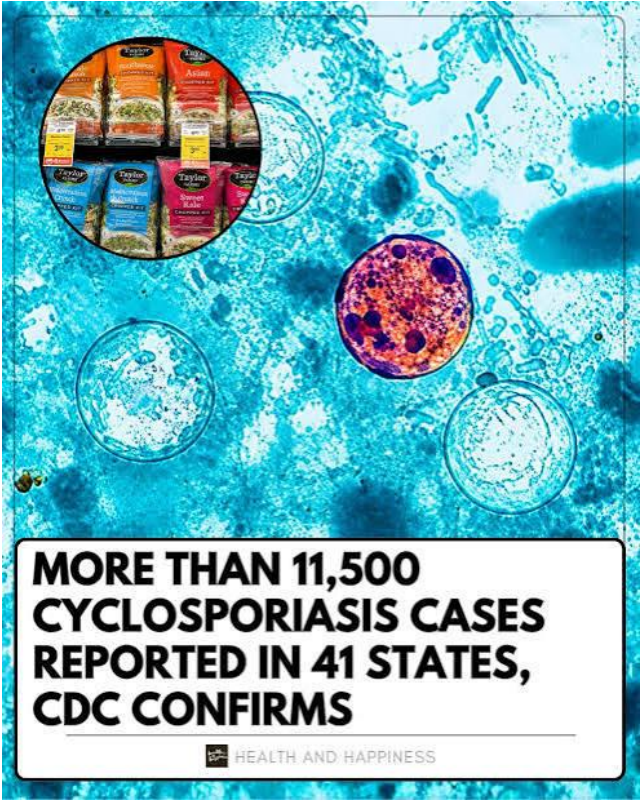
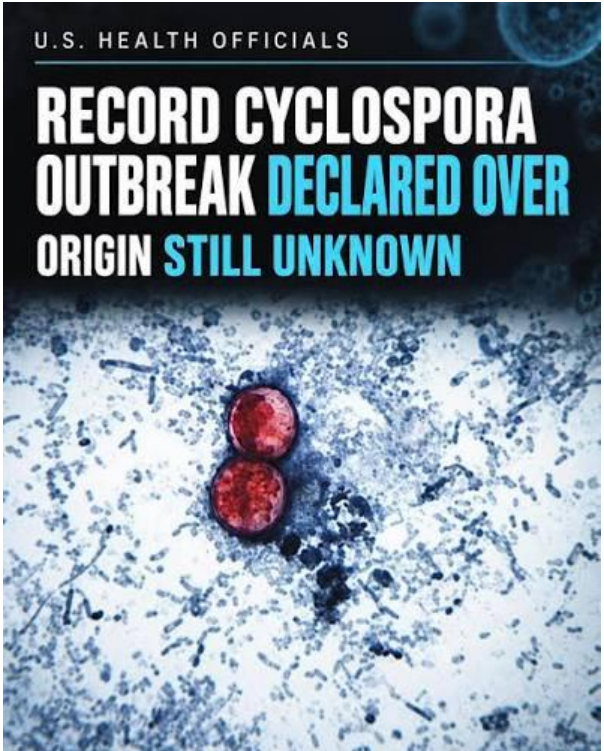
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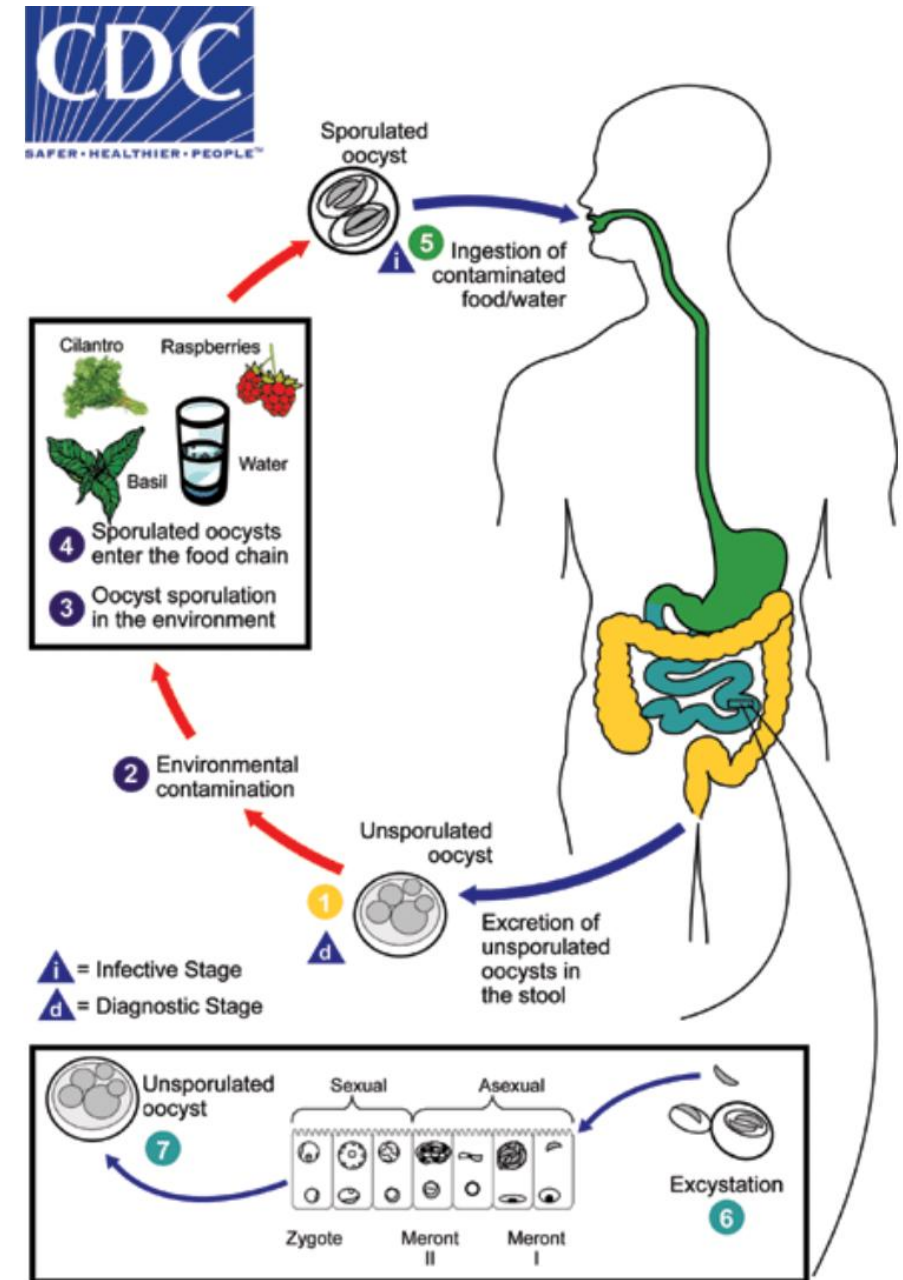


2026 National *Cyclospora* Outbreak



Cyclospora- a Protozoan Pathogen

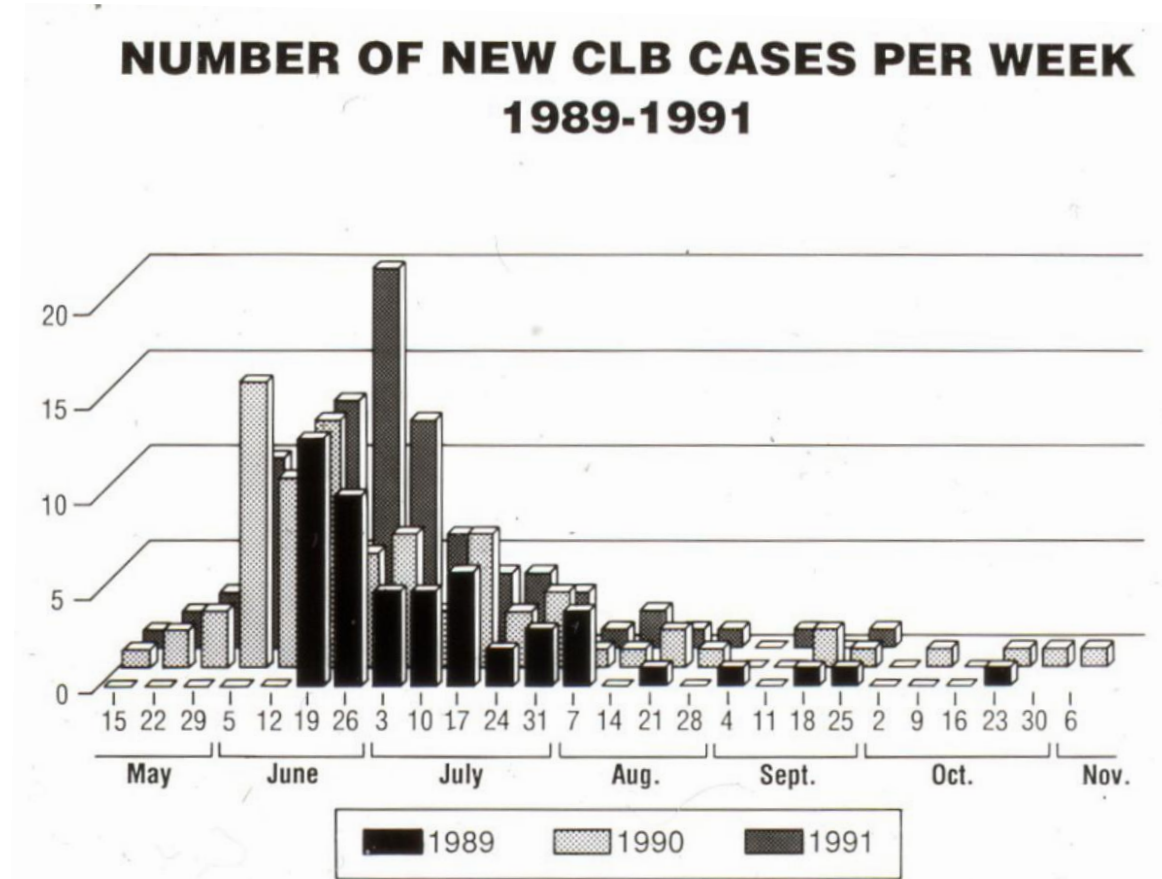
- Obligate intestinal parasite
- Fecal-oral transmission
- Only found in humans
- Causes flu-like symptoms and severe diarrhea
- Extremely resistant to current disinfection practices



Environment and Temperature Important to Transmission

- Oocysts are excreted in the feces needs time in the environment to mature to an infectious stage and this occurs at temperatures between 23 to 32°C (73- 89 °F).
- Common produce associated with outbreaks basil, berries, cilantro, lettuce, raspberries.

Seasonal Transmission CDC



Outbreak statistics

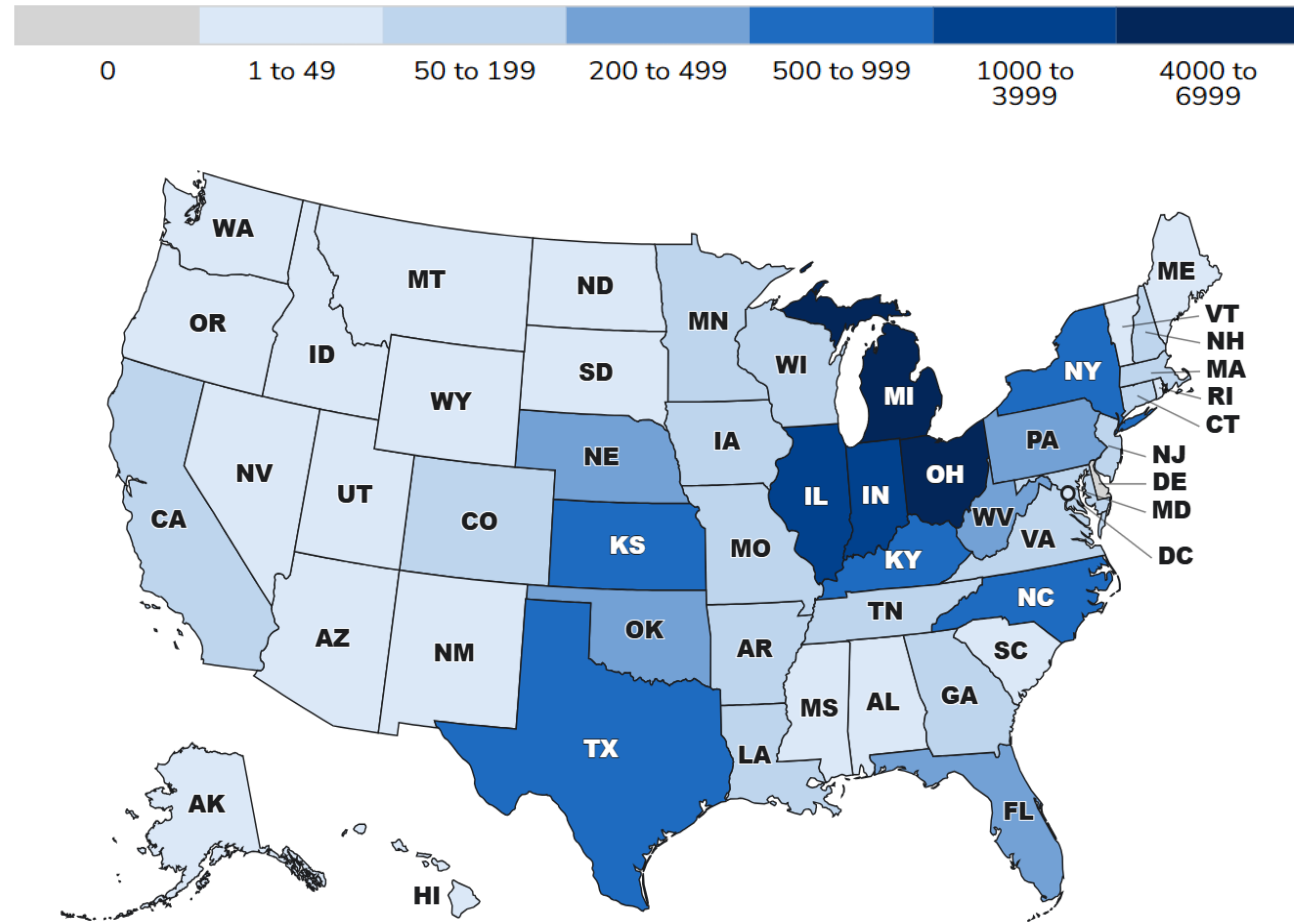
CDC reports (June-September 2026)

- 19,883 laboratory confirmed cases
- 1,046 hospitalizations nationwide.

Michigan Outbreak reports

- 14,718 clinical cases
- 366 hospitalizations
- 2 deaths

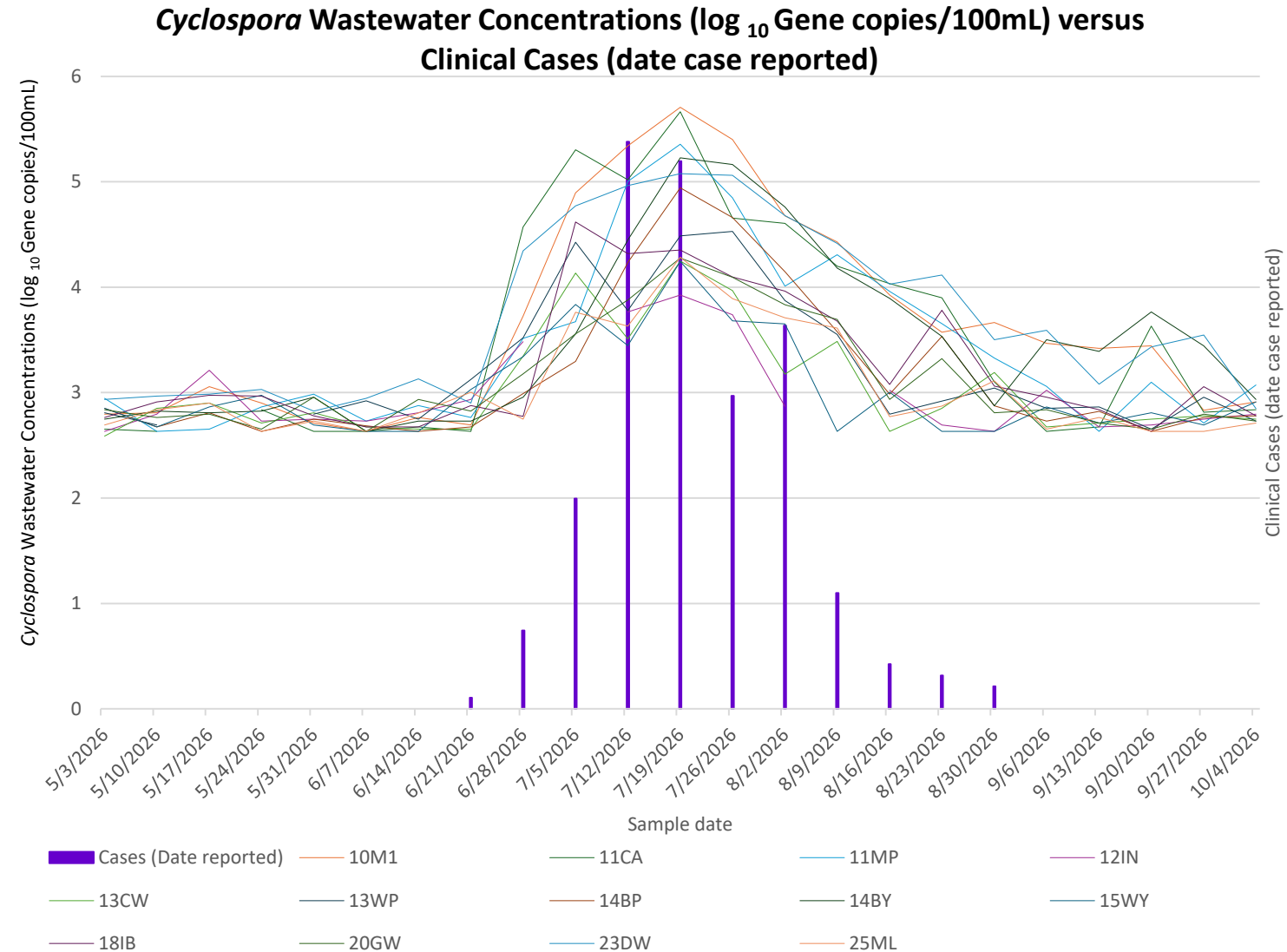
Number of cases



Updated on September 15, 2026. The map shows data for 19,883 confirmed *Cyclospora* cases reported to CDC as of September 14, 2026.

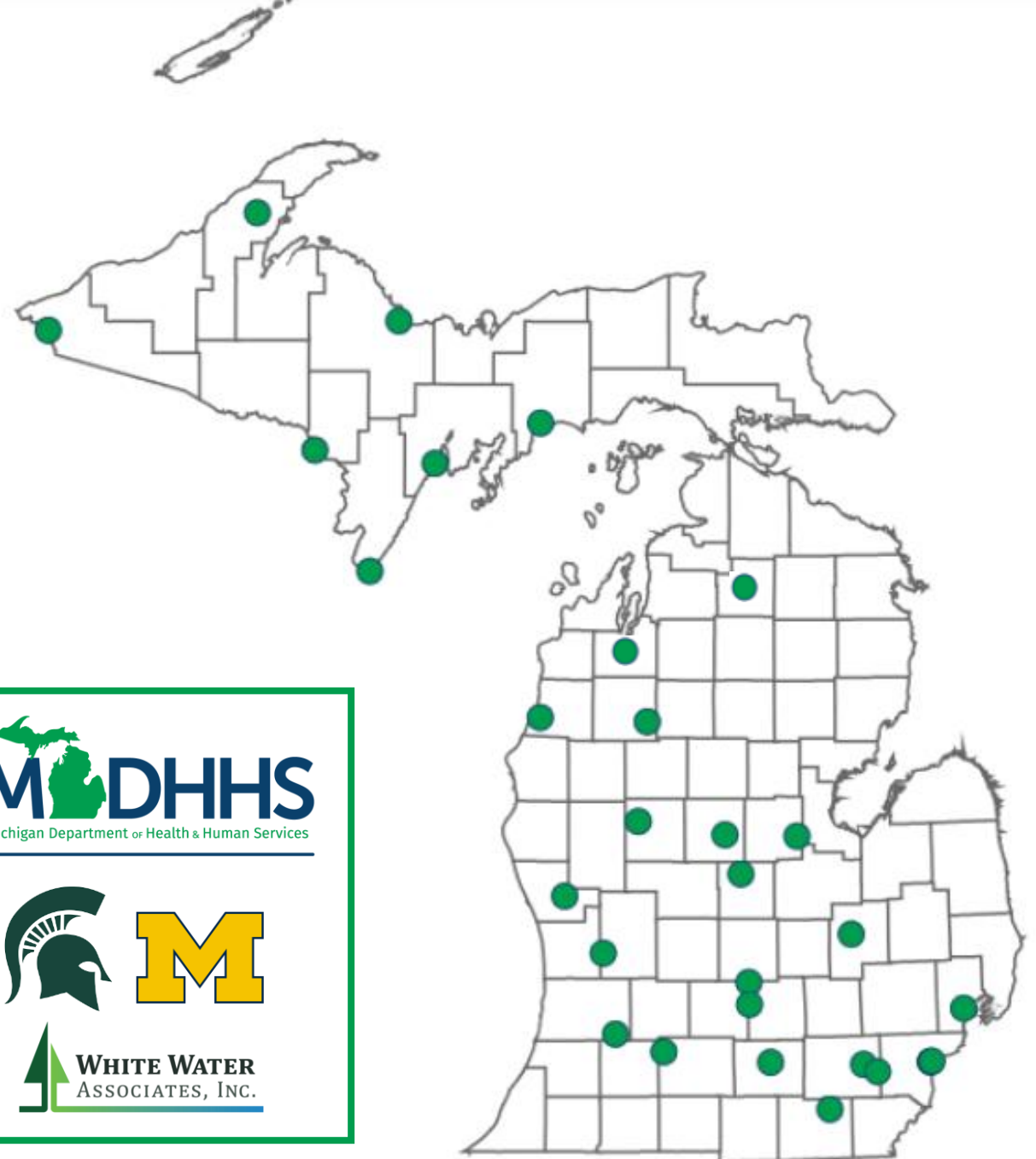
How is wastewater testing helping Michigan?

- **Correlated with actual Cases**, thus helps identify where the disease is still prevalent
- **EARLY WARNING:** Wastewater retrospectively would have identified the outbreak on June 14, 2026.
 - one week prior to the first cases reported on June 24.
 - two weeks prior to the outbreak announcement on July 1.
- 85% (11/13) wastewater sites were positive when the clinical outbreak was announced on July 1, 2026.
- 23% (3/13) wastewater sites were positive as of Oct 4, 2026.



Current MI Wastewater Testing Network

- 4 wastewater testing labs
- 28 sampling sites
- 1-2 samples/week
- 8 targets:
 - SARS-CoV-2,
 - Flu A/H5,
 - Flu B,
 - RSV,
 - Norovirus GI/GII,
 - Measles
- Tested over 100,000 samples since 2020



Thank you to the members of the Water and Environmental Health Laboratory (WEHL) at Michigan State University



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Questions?



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