

Food Safety in Michigan: Recent Concerns and Solutions

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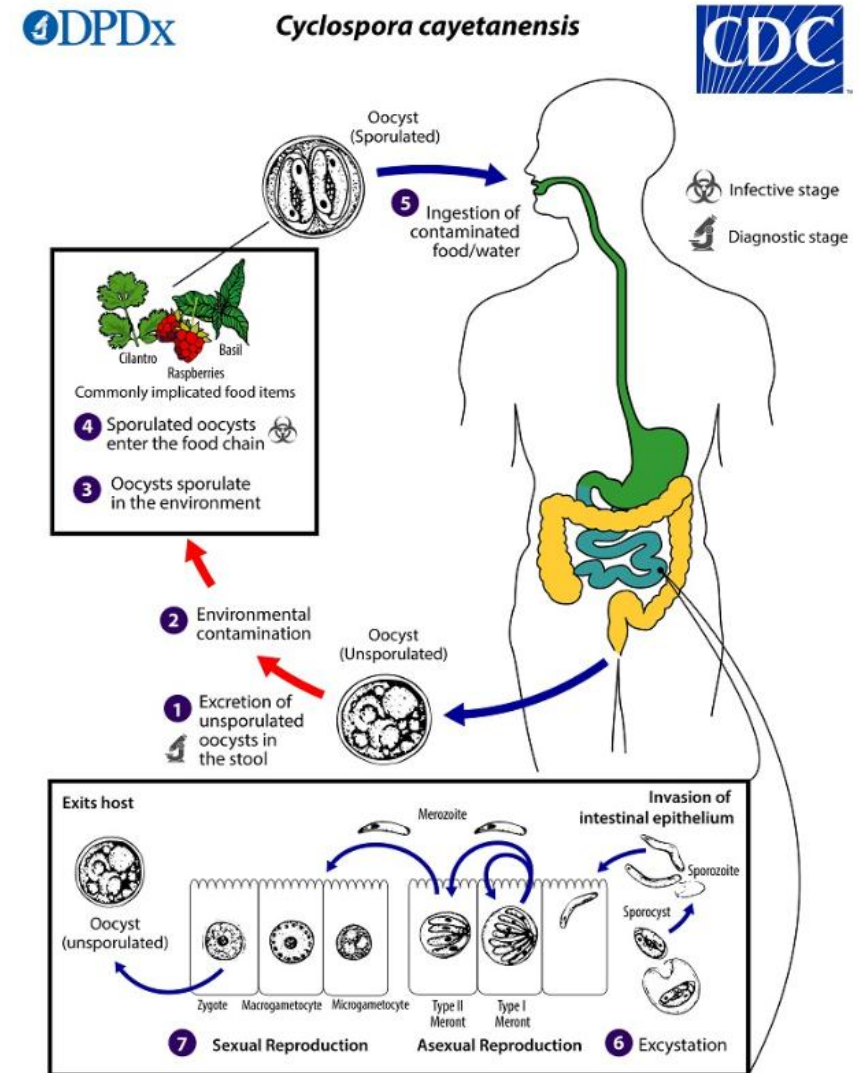
Some recent food safety stories

- *Cyclospora* in iceberg lettuce, & its associated disease cyclosporiasis
- *Cronobacter* in infant formula from plant in Sturgis, MI
- Why Michigan? What can we do?



Cyclosporiasis: Introduction

- Cyclosporiasis: GI illness caused by parasite *Cyclospora cayetanensis*, a protozoan parasite that infects small intestine of humans – no other species
- Sporulation of oocyst occurs at temperatures between 72 to 90 °F: tropical and subtropical areas
- *Cyclospora* contaminates fresh produce through human feces: oocyst very environmentally resistant (vinegar soak ineffective; must cook to 160 F)
- After 2-14 days incubation, symptoms: diarrhea, stomach cramps/pain, loss of appetite, weight loss, bloating, nausea and fatigue; possibly lasting weeks



Cyclospora Outbreak Starting in May 2026

- Symptoms first reported through public health channels May 1
- Because window from first symptoms reported to official diagnosis ~6 weeks, long delay in noting outbreak
- As of July 13, *Cyclospora* infections were identified by local and state health officials among individuals who reported eating at Taco Bell locations across Michigan, Ohio, Indiana, Kentucky and West Virginia
- July 17-August 15: First FDA implicates Taylor Farms, Taylor Farms recalls all bagged lettuce, FDA withdraws retraction, then reaffirms – Why?



Iceberg lettuce product recall

- On July 17, 2026, Taylor Farms de Mexico recalled all iceberg lettuces sourced from central Mexico.



Source: Instagram Ksbw_8, July 24



[1/3] A cyclist rides past the installations of U.S. supplier Taylor Farms, in Doctor Mora, Guanajuato state, Mexico, July 24, 2026. REUTERS/Daniel Becerril/File Photo [Purchase Licensing Rights](#)

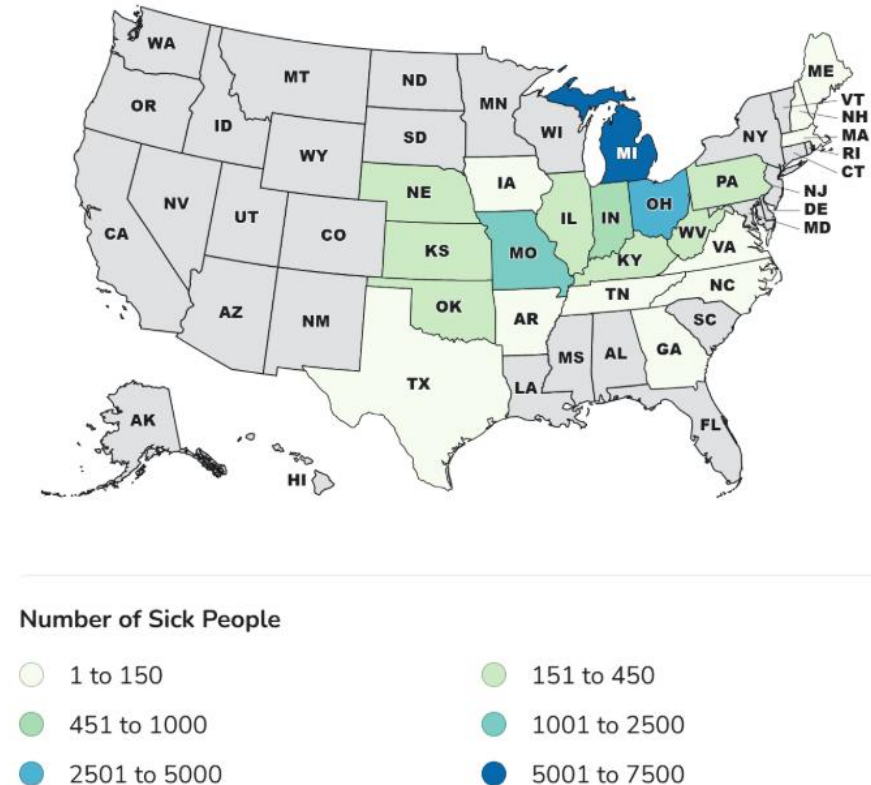
Source: <https://www.reuters.com/business/healthcare-pharmaceuticals/former-fda-chief-says-central-mexico-may-have-broad-cyclosporiasis-contamination-2026-07-27/>



Cyclosporiasis case counts

- Case counts (CDC update October 2, 2026)
 - Total Illnesses: 12,883
 - Hospitalizations: 570
 - Deaths: 2
 - Last Illness Onset: August 17, 2026
 - States with Cases: AR, GA, IA, IL, IN, KS, KY, MA, ME, MI, MO, NE, NH, NC, OH, OK, PA, TN, TX, VA, and WV
 - Both deaths were reported in Michigan and both individuals had underlying health conditions that may have been impacted by *Cyclospora*
 - Michigan Health & Human Services reports the number of total cases to be 14,718
- Note: CDC's reported case count is different from MI-DHHS

Case Count Map Provided by CDC

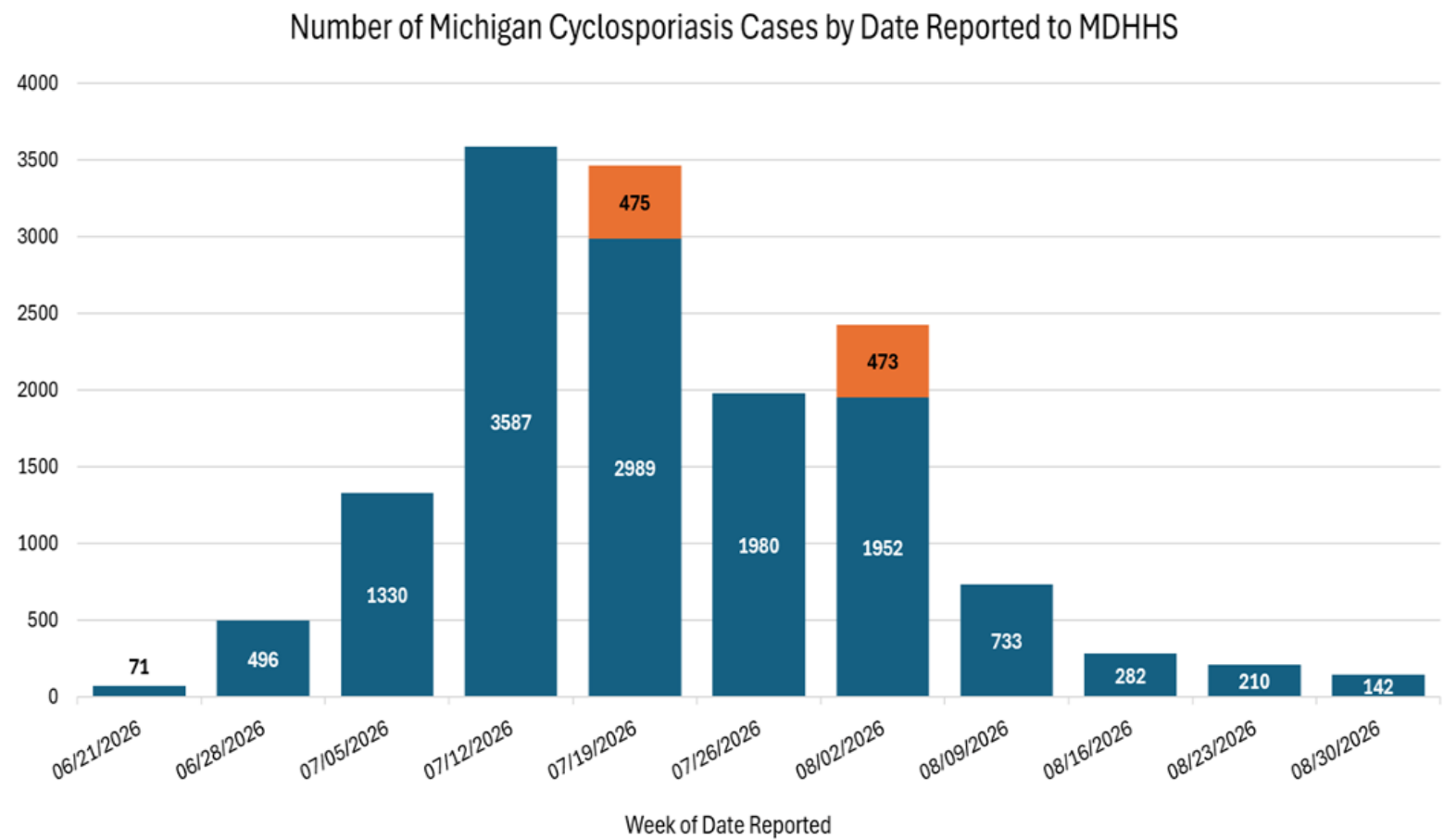


Source: https://www.fda.gov/food/outbreaks-foodborne-illness/investigation-multistate-outbreak-cyclospora-illnesses-iceberg-lettuce-july-2026?_sp=189501e3-5273-4fa9-b2fb-ab95822d5a66



Cyclosporiasis in Michigan

This graph shows the cyclosporiasis cases reported to MDHHS from June 22, 2026, through 9:30 a.m. September 3, 2026.



Source: <https://www.michigan.gov/mdhhs/keep-mi-healthy/infectious-diseases/infectious-disease-outbreaks>



Infant Formula: Introduction

- Why is infant formula so critical?
 - Specialized food product: mimics composition and function of human breast milk as much as possible
 - Consumers of the product are young infants: highly vulnerable subpopulation
 - Partially or fully replaces breast feeding: >50% of infants in the US depend on infant formula
 - Apart from human breast milk, no close nutritional substitute for young infants



Source: <https://askdrvivi.com/infant-formulas-understanding-the-basic-differences-by-sarayu-kumar-md-faap/#>



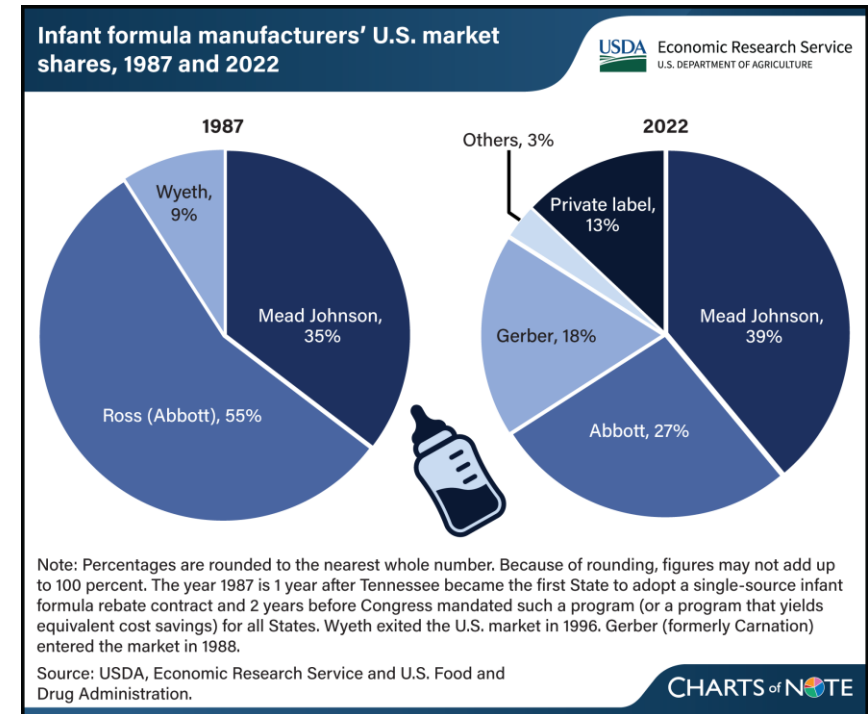
Source: <https://www.fda.gov/food/resources-you-food/infant-formula-homepage>



Infant Formula Market in the US

- In 2025, the US infant formula market reached a valuation of USD 5.73 billion. It is projected to grow at about 5.3% annually between 2023- 2032.
- The market is dominated by few large manufacturers that hold most of the market shares. Some factors related to the oligopolistic market structure are:
 - High initial production costs
 - Regulations
 - High tariffs (about 14.9% to 17.5%)
 - WIC rebate contracts

Note: WIC contract winning manufacturers see their market share increase substantially as more than 50% of infant formula is consumed by WIC enrolled infants



The Infant Formula Recall Event: 2022

- As of 2021, Abbott Nutrition held a 40% market share. Before closing, the facility in Sturgis, MI which is Abbott's largest, accounted for 20% of the US infant formula (9). Sturgis, MI facility produces **Similac**: most popular brand in the US.
- On 17 February 2022, Abbott Nutrition recalled specific infant formulas (e.g. Similac) that were produced in its Sturgis, MI, facility due to potential ***Cronobacter sakazakii*** contamination
 - Pathogenic bacteria that can cause illness, primarily among infants younger than two months, especially who are born premature, with low birth weight and with weak immune systems
 - Is naturally found in the environment and is particularly good at surviving in low-moisture dry foods such as powdered infant formula
 - Tolerant to low pH conditions (acidity) of the infant stomach



Issues at Sturgis, MI plant

- During testing by the company in the facility, *C. sakazakii* was found in non-product contact areas in the facility
- FDA later identified noncompliance with sanitation protocols, revealing the presence of *C. sakazakii*, as well as water leaks and equipment cracks at the plant



C. sakazakii bacterium . Source: <https://blog.microbiologics.com/environmental-isolate-case-file-cronobacter-sakazakii/>



Abbott Sturgis MI plant. Source: <https://www.wlrn.org/news/2022-07-11/abbott-reopens-michigan-baby-formula-plant-after-flooding>



Issues at Sturgis, MI plant

Source: Berfield S., Edney A. (2022) How Deadly Bacteria Spread in a Similac Factory—and Caused the US Formula Shortage. **Bloomberg.** <https://www.bloomberg.com/news/features/2022-08-25/baby-formula-shortage-a-deadly-bacteria-and-abbott-s-abt-missteps>

“Abbott's routine testing had turned up cronobacter at the plant five times in the previous two years, which isn't unusual for a formula maker. More concerning, the bacteria had twice made its way into the formula itself, in cans ready for distribution. Abbott held back the cans in those batches but didn't recall any others. The company wasn't required to notify the FDA, and it didn't. Abbott was expected to fix whatever may have allowed the contamination and said that it had. Yet the inspectors watched as a worker reached into a bag containing an essential ingredient without cleaning his gloves or hands—just the kind of sloppiness, they noted, that could spread cronobacter from work surfaces to the powder. They found more to fault: crucial drying equipment with a history of pits and cracks where cronobacter could hide; pooled water where it could multiply.”



The Impact on Consumers: Health

- More than a hundred complaints related to Abbott's formulas were received by the FDA.
- CDC identified four confirmed *Cronobacter* infections, who had consumed infant formula produced at Sturgis facility. The infection may have contributed to two deaths.
- Definitive causal links between other infant deaths and *Cronobacter* contamination could not be established.
- *Cronobacter* may have contributed to the death of two infants who consumed formula produced in the Sturgis facility.

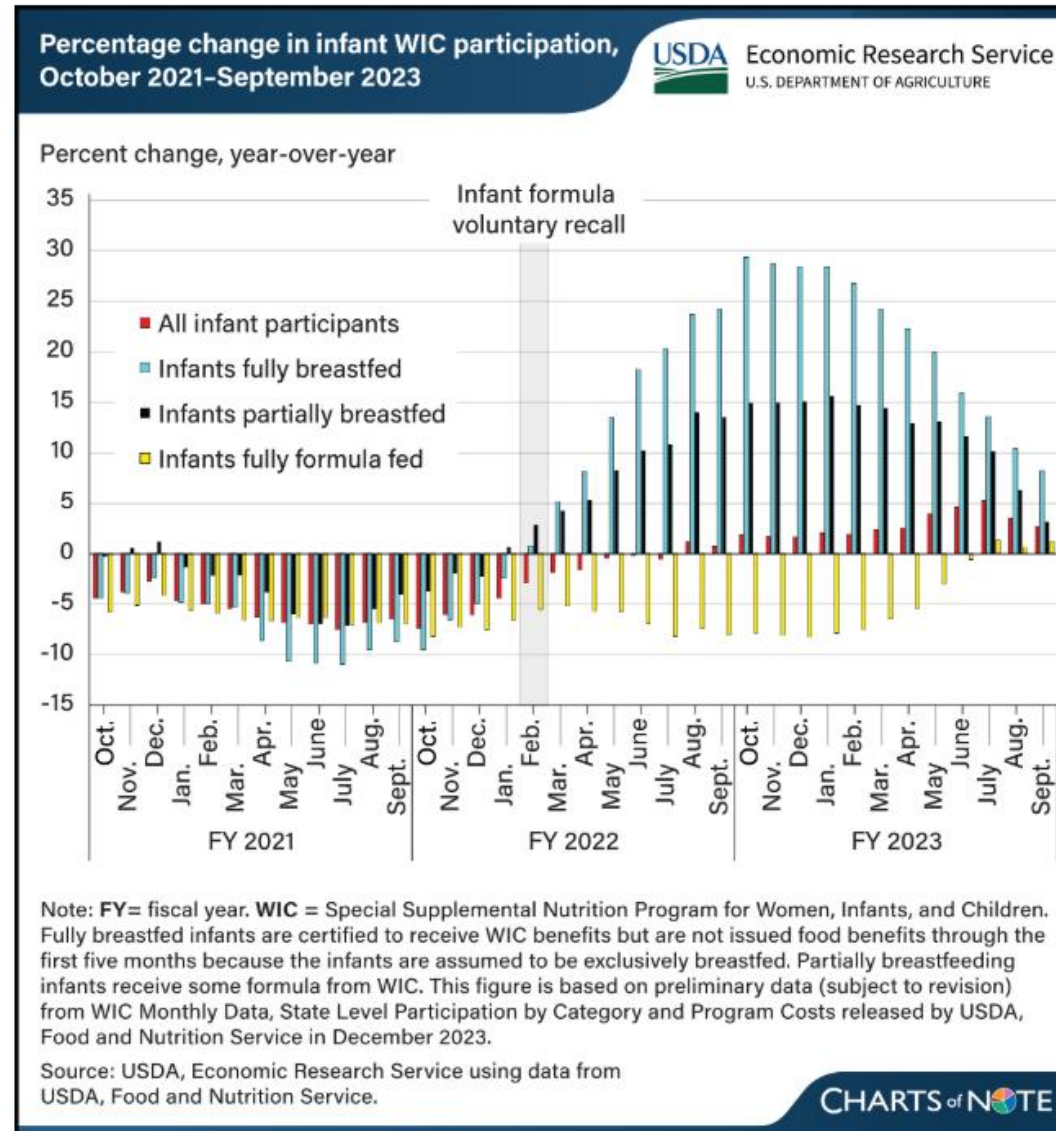


The Impact on Consumers: Product Purchases

- The infant formula supply was reduced by roughly 14 million pounds between late February and April 2022.
- Relaxed import restriction and increased production by other companies did not eliminate shortage.
- As media attention on the shortage and safety issues grew, *panic-buying* and *stockpiling* behaviors increased.
- Retailers started to impose limits on infant formula product purchases.
- WIC allowed more flexibility in the type, size, and brand of formula, helping parents access safe options available on store shelves.



The Increase in Breastfeeding among WIC Infants



What can we do?

- Most importantly, **learn lessons from past outbreaks**
- Cyclosporiasis: now health care facilities as well as agricultural production stakeholders are on the alert
- Infant formula facilities: awareness of circumstances resulting in severe contamination events

