

# PREGNANCY-ASSOCIATED LISTERIOSIS IN CAMERON COUNTY, TEXAS



# A REVIEW ON FETAL LOSS RELATED TO INTERNATIONAL CHEESE PRODUCTS

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## BACKGROUND

The bacterium *Listeria monocytogenes* causes infection through contaminated foods. Pregnant women are more at risk because pregnancy-associated listeriosis can result in severe illness in newborns, preterm birth, miscarriage and stillbirth. Due to Cameron County's close proximity to the Mexican border, the commerce of food products is more prevalent than anywhere else within the country, raising the risk of the public consuming products manufactured under different health and safety regulations, some of which may not sufficiently reduce the risks of *Listeria monocytogenes*.

## OBJECTIVE

To analyze pregnancy-associated listeriosis cases in Cameron County over a 10 year period (2015–2024), with an emphasis on identifying binational food exposures, particularly queso fresco and other Mexican-style cheese consumption, as well as to develop directly targeted educational public health initiatives for our border area.

## METHODS

Conducted a 10 year traceback analysis of the *Listeria* cases reported to Cameron County Public Health from 2015 to 2024.

Reviewed all listeriosis cases report forms associated with pregnant women detailing maternal and neonatal outcomes.

Performed a detailed review of the case reports for confirmed pregnancy-associated listeriosis cases with a focus on food exposure history.

Calculated the incidence rate for Cameron County using the census data from the United States Census Bureau.

Compared the incidence rate for Cameron County and the State of Texas using the incidence rates reported on the DSHS website.

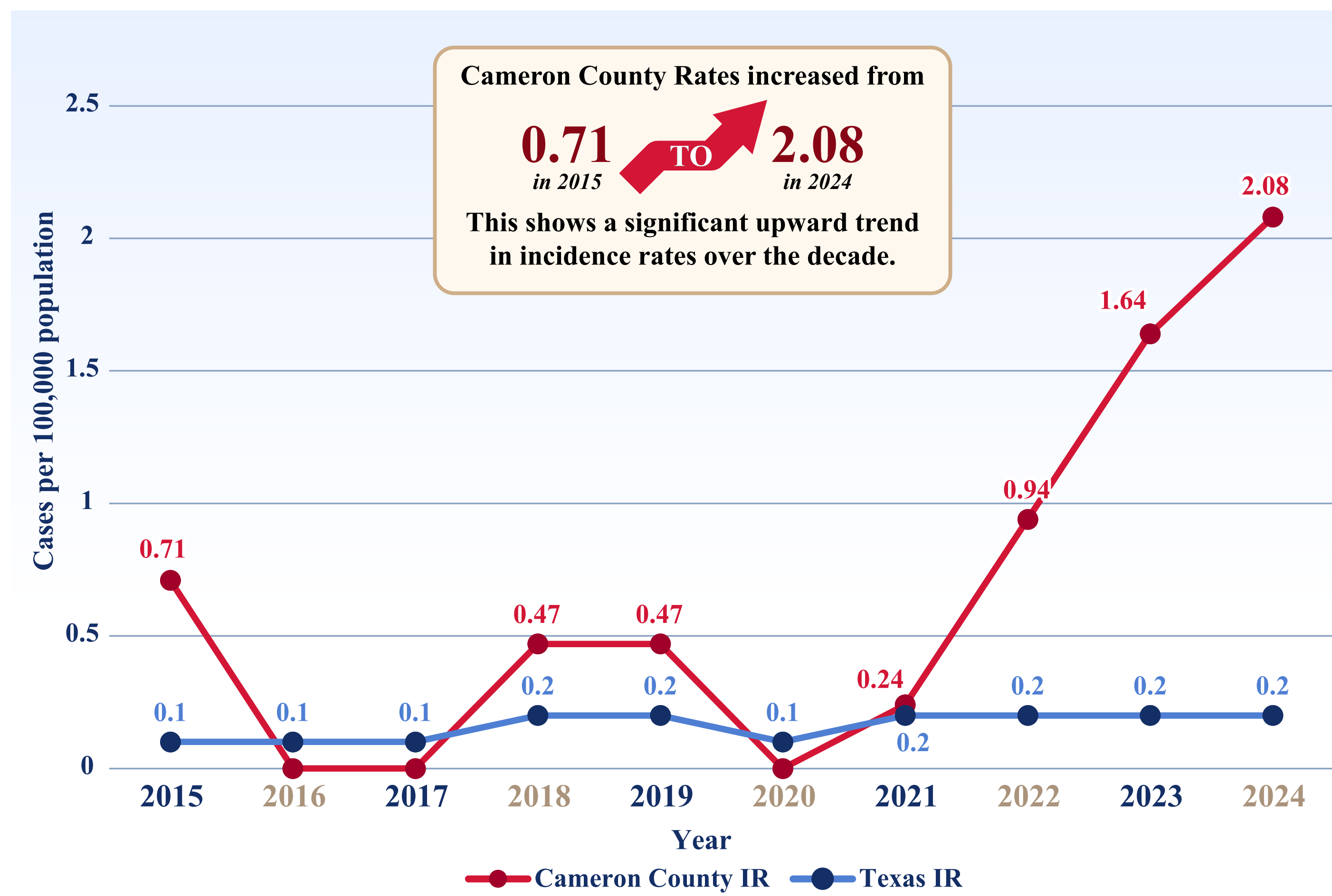
## INCIDENCE TREND

### LISTERIOSIS INCIDENCE RATE: Cameron vs Texas (2015-2024)

Cameron County exceeded Texas State rates with a sustained upward trend.

**Cameron County Annual Incidence (2015-2024) = 0.66 per 100,000**

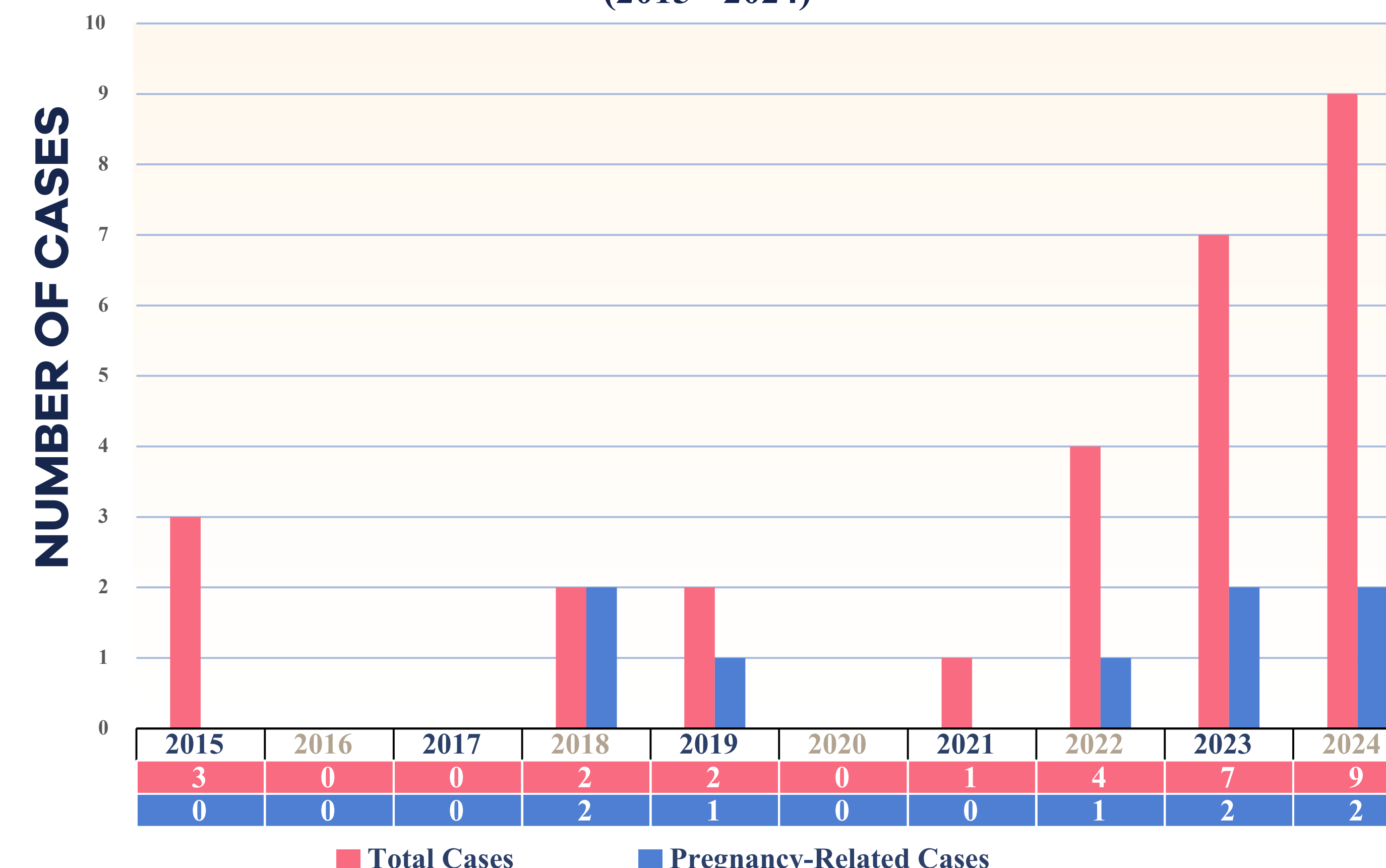
**Texas Average Annual Incidence (2015-2024) = 0.16 per 100,000**



- Incidence Rates (IR) are expressed per 100,000 population.
- Data source: Texas NEDSS Finalized Data File, 2015-2024.
- Texas rates were calculated using population projections from the Texas Demographic Center's Texas Population Projects Program (updated March 2022).

## CASE COUNTS BY YEAR

TOTAL & PREGNANCY-ASSOCIATED LISTERIOSIS CASE COUNTS (2015 - 2024)



• Cameron County 2015-2024 n = 28 total, 8 pregnancy associated.

## RESULTS

<b>TOTAL CASES</b> <b>28</b> Listeria Cases Over 10 Years	<b>MATERNAL OUTCOME</b> <b>All 8 Mothers Survived</b>
<b>PREGNANCY ASSOCIATED CASES</b> <b>8</b> (29% of total)	<b>NEONATAL OUTCOMES</b> Miscarriages: <b>4</b> Preterm Live Births (Survived): <b>4</b>
<b>MEXICAN-STYLE CHEESE EXPOSURE</b> Yes: <b>6</b> (75%) No: <b>1</b> Unknown: <b>1</b>	

## DISCUSSION & TAKEAWAY

In pregnancy related cases, 75% of the individuals reported to have consumed queso fresco. While maternal survival was 100% in all pregnancy-related cases, fetal outcomes were not as optimistic with a split between 50% live preterm births and 50% miscarriages.

Given the small sample size, the findings given here are exploratory and hypothesis-generating, and will serve as a foundation for future studies.

## PUBLIC HEALTH RECOMMENDATIONS

- Pregnant women should avoid imported and unpasteurized dairy products, including queso fresco and other Mexican-style soft cheeses.
- Continue partnerships with local health providers for prompt case notification and investigation.
- Target health education to our border communities about food safety and the potential risks of imported food products.



## REFERENCES

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