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Introduction

- The rate of campylobacteriosis in SF (48 cases per 100,000 residents in 2005) is the highest in California and is significantly greater than rates for the Bay Area region and the United States.
- The epidemiology of campylobacteriosis in SF is not known. In accordance with state regulations, individual cases are not routinely investigated and descriptive demographics in surveillance data are incomplete.
- Numerous studies have implicated consumption of animal products, especially poultry, as risks for Campylobacter infection. Other established risk factors include consumption of raw seafood and unpasteurized dairy products, foreign travel, AIDS, and contact with domestic animals and natural water sources.
- CDC estimates actual national incidence to be 38 times the number of cases reported.

Aims

- To characterize the epidemiology of campylobacteriosis in SF.
- To identify exposures that may influence the high burden of campylobacteriosis in SF.

Methods

- We interviewed 58 (75%) of 77 lab-confirmed cases reported to the San Francisco Department of Public Health from May 15, 2006 to August 18, 2006.
- We collected demographics and information on potential risk factors during the week before illness onset.

We queried case-patients about established and potential risk factors, including: travel history, immune-compromising conditions; consumption of chicken, other poultry, raw seafood, unpasteurized milk, undercooked eggs, and untreated water; contact with recreational water; contact with pets, farm animals, and animal feces; household size, number of household members sick before and after case onset; and sexual contacts.

We used a professional medical interpretation service for 5 cases with limited English skills.

Results

- Most (48%) were 25-44 years of age; approximately half (47%) were female.
- Approximately half (47%) were white, 16% Asian/Pacific Islander (API), 12% Latino, 4% African American, and 4% another race or ethnicity. API cases were underrepresented and whites overrepresented. The distribution of African American and Latino cases was similar to that for the SF population.
- Most case-patients were English speakers (93%) and were born in the US (57%).
- 72% ate chicken, 38% lived in households where raw chicken was prepared (whether or not it was consumed by the case), and 19% ate poultry other than chicken.
- 35% had pets at home and 22% had contact with other people’s pets.
- 31% reported foreign travel.
- 14% reported having any type of immune compromising condition.
- 16% of case-patients ≥15 years of age had sexual contact; no sexual contact between men was reported.
- 84% had ≥2 established risk factors; few (4%) had no established risk factor.

Conclusion

- Lab-confirmed cases in SF were similar in sex and age to reports from national surveillance programs.
- We identified fewer API cases than expected.
- We identified risk factors for campylobacteriosis in SF that were consistent with those identified by other observational studies conducted in the US.
- We will use these findings to develop hypotheses for further studies of campylobacteriosis in SF. Because most cases had multiple risk factors, controlled analyses are required to elucidate the reasons for the high burden of disease in SF.