

Trends, Age, And Sex Differences In Pediatric Myocarditis In Texas 1999-2015

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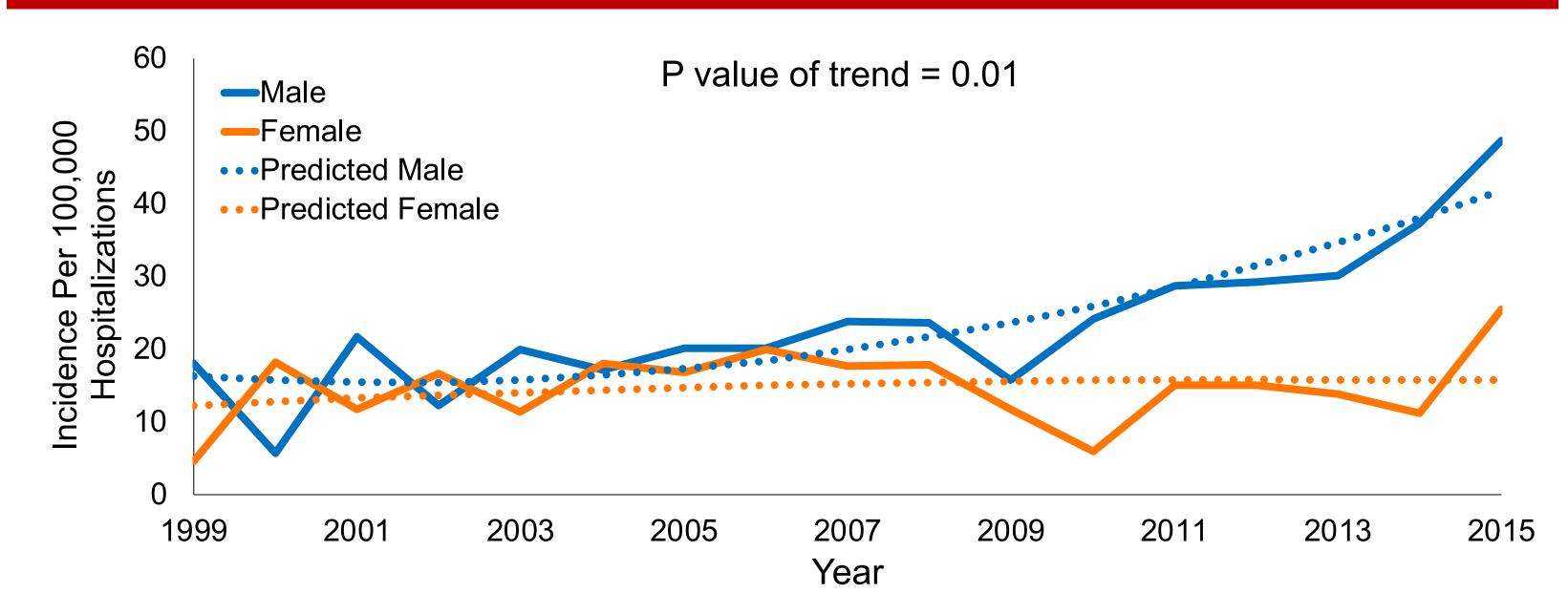
BACKGROUND

- We aimed to estimate the incidence of myocarditis and to evaluate trends in myocarditis hospitalizations by age and sex for children in Texas.
- We hypothesized that the incidence of myocarditis has increased over time in Texas and that males are more affected than females.

METHODS

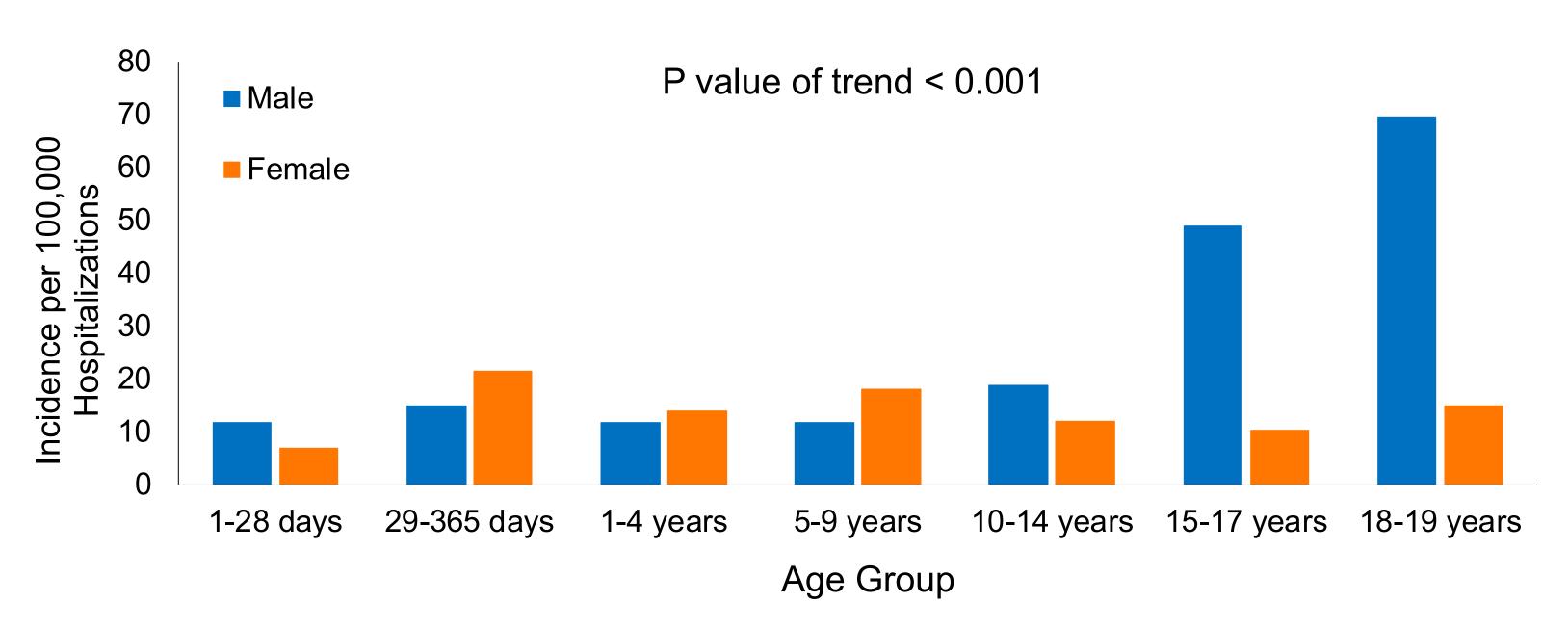
- Data source: Texas Inpatient Public Use Data File, a population-based administrative database containing all hospitalizations in Texas
- Included: Hospitalizations <20 years of age with ICD-9/ICD-10 diagnostic codes for myocarditis, January 1999 through September 2015
- Excluded: pregnancy/birth hospitalizations
- Estimated population incidence was calculated using number of myocarditis hospitalizations over corresponding United States Census data for Texas.
- Hospitalization rates for myocarditis were then compared over the 17-year study period and by age and sex, excluding hospitalizations for pregnancy or birth.

FIGURE 1: INCIDENCE OF MYOCARDITIS PER 100,000 HOSPITALIZATIONS, BY YEAR



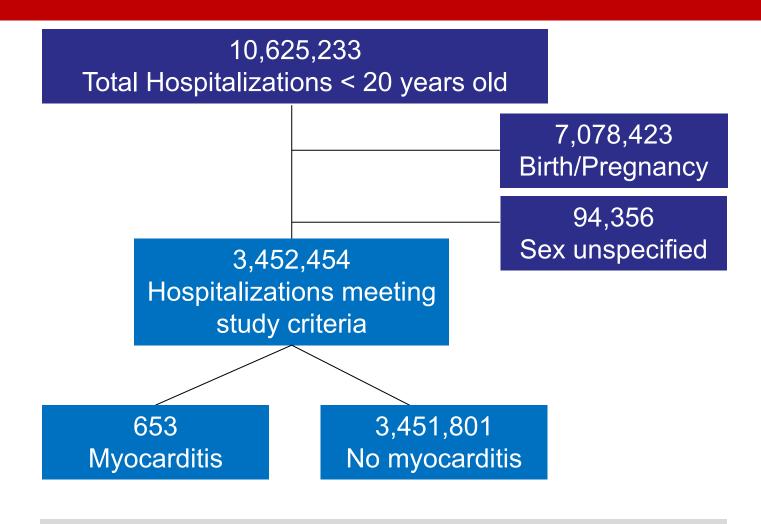
• Proportion of hospitalizations for myocarditis is increasing in males, while it is stable in females.

FIGURE 2: INCIDENCE OF MYOCARDITIS PER 100,000 HOSPITALIZATIONS, BY AGE



Incidence of myocarditis is highest in adolescent males.

RESULTS



Total census person years: 120,418,953

- Overall incidence: 0.54/100,000 person-years
- Increasing admissions from 12/100,000 in 1999 to 36/100,000 in 2015
- Sex difference was age-dependent (p < 0.001)
- Sex difference was year-dependent (p = 0.01)

LIMITATIONS

- Administrative data are limited by use of ICD-9/ ICD-10 codes and assumes accurate coding
- Data limited to Texas

CONCLUSIONS

- Myocarditis admissions in Texas have increased over time due to increased incidence in males.
- Males were more likely to be hospitalized with myocarditis than females, and children were most likely to be affected in later adolescence.
- Reasons for differences by year, sex, and age warrant further investigation.