

**INTRODUCTION**

A data analysis describing injury mortality and hospitalization variation by age, gender, injury category and leading causes, and highlighting subgroups of the study population who are at higher risk for injury by region, year and place of occurrence of injury events. Time trends by year, age group, sex and region are also described. Injuries seen in emergency departments are examined by age, gender, time of occurrence, activity, location, mechanism, breakdown event, nature of injury, injured area of the body and outcome of emergency department visits.

**METHODOLOGY**

**DATA SOURCES**

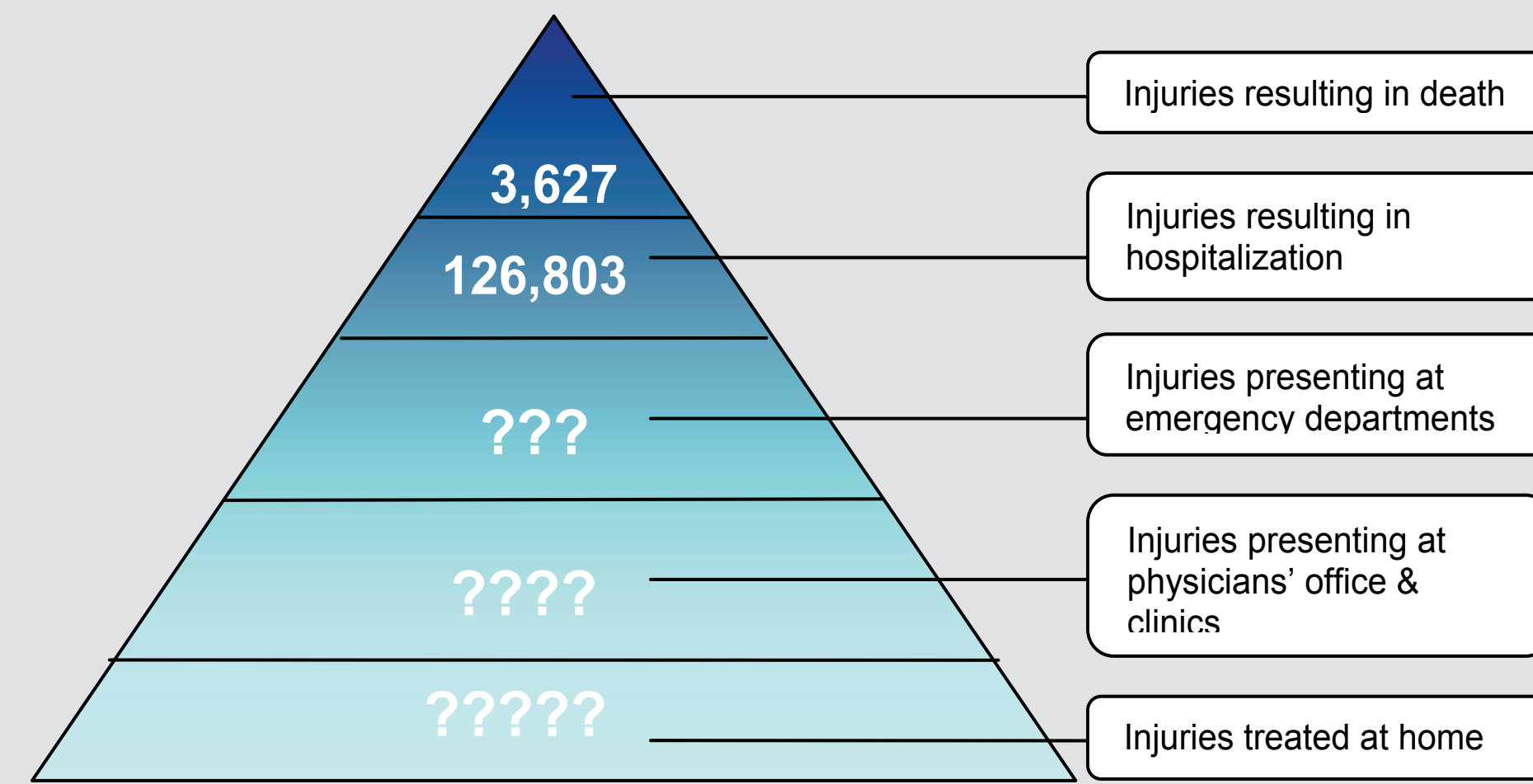
- BC Vital Statistics mortality data
- BC hospital separation data
- BC's Children's Hospital (BCCH)
- Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) data
- Thompson Health Region (THR) Emergency Department Injury Surveillance System (EDISS) data

**ANALYSIS**

Rates were calculated per 100,000 population for age, gender, year, leading injury and Health Region. Additional analyses were conducted by comparing age-standardized rates over time. Trend analyses were conducted using a Chi-square test for statistical significance

**WHO SUSTAINS INJURIES?**

Unintentional Injuries, 1987-2000, British Columbia, Children & Youth (0-24 years)



- In general, mortality and hospitalization separation rates for males, in all age groups except ages 0-4 years and for all categories analyzed, were significantly higher than their female counterparts, with male rates often more than twice as high as female rates
- Mortality and hospitalization separation rates for both males and females showed a statistically significant downward trend over the years analyzed (1987-2000 and 1989-2000)

**RESULTS**

**WHEN AND WHERE DO INJURIES MOST COMMONLY OCCUR?**

- Emergency Departments reported higher injury frequencies during the late spring and early summer to early fall months, with injuries generally occurring more frequently in the afternoon and early evening hours of the day. In general, injuries most commonly occurred during weekends.
- Injuries most frequently occurred at home, in places of sport and recreation, and inside or on the grounds of schools or public buildings.

**WHAT ARE THE MOST COMMON TYPES AND CAUSES OF INJURY?**

**TYPES**

- For both genders, *Fractures* and *Open Wounds* (including lacerations, punctures and penetrating wounds) were the most common type of injury leading to hospitalization, with the greatest frequency occurring in the *Upper Limb* category, followed by *Lower Limb* and *Other Fractures*. *Superficial* injuries such as minor bruises and abrasions, *Open Wounds* and *Fractures* were the most common injuries treated in the Emergency Department

- Emergency Departments found that the most frequently injured body parts were the *Head and Neck*, followed by injuries to the *Shoulders and Arms*, and to the *Lower Extremities* (hip and leg)

**CAUSES**

- The most common causes of unintentional injury mortality were: *Motor Vehicle Traffic, Drowning/Submersion, Suffocation, Fire/Flames/Hot Substances, and Poisoning*
- The most common causes of unintentional injury hospitalization separations were: *Falls, Motor Vehicle Traffic, Struck by Object, Poisoning, Non-Motor Vehicle Pedal Cycle and Foreign Body*

**RECOMMENDATIONS FOR FUTURE RESEARCH**

**SURVEILLANCE**

- Develop, implement and evaluate a comprehensive injury mortality and morbidity data collection system including emergency departments in British Columbia.

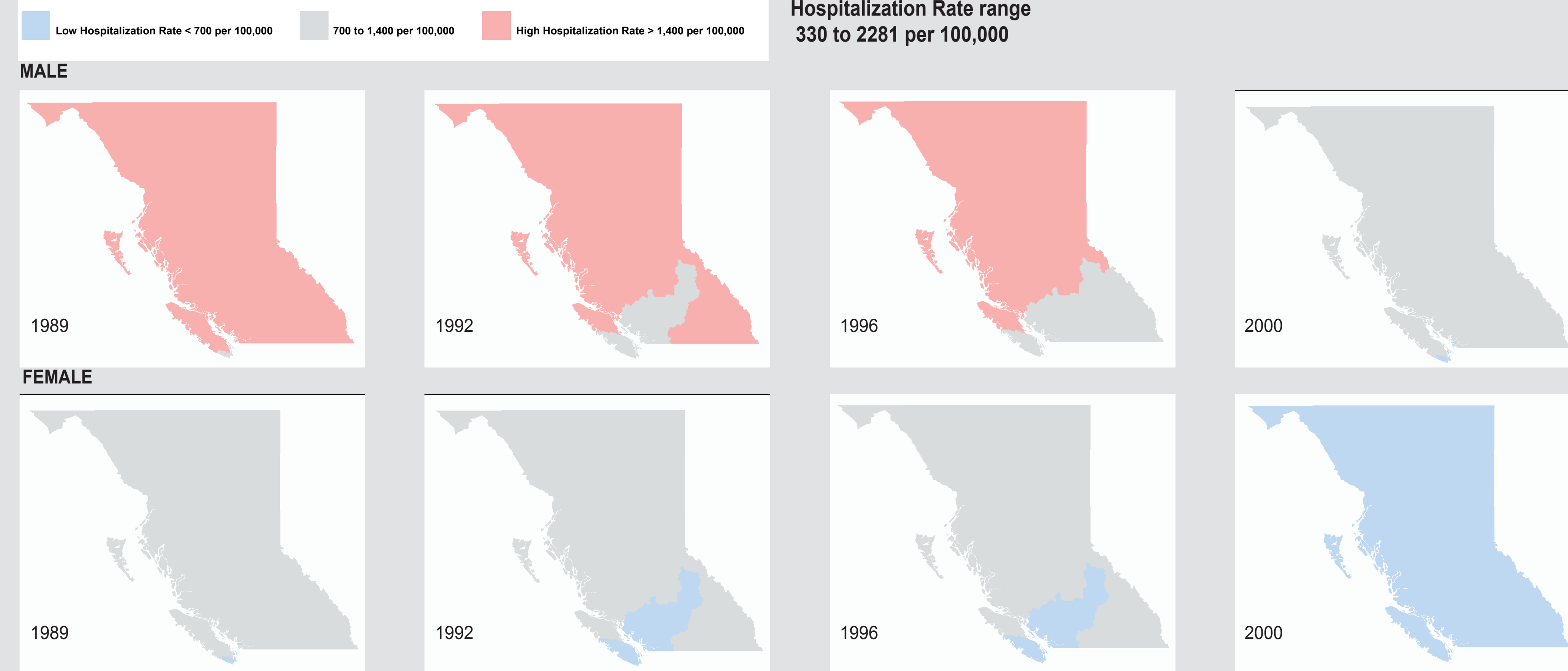
**RESEARCH**

- Increase the level of support for injury research in BC. Priorities include the magnitude, etiology, biobehavioural and psychological determinants of injuries among children and youth.
- Develop a series of systematic reviews that would synthesize existing knowledge into areas of injury prevention

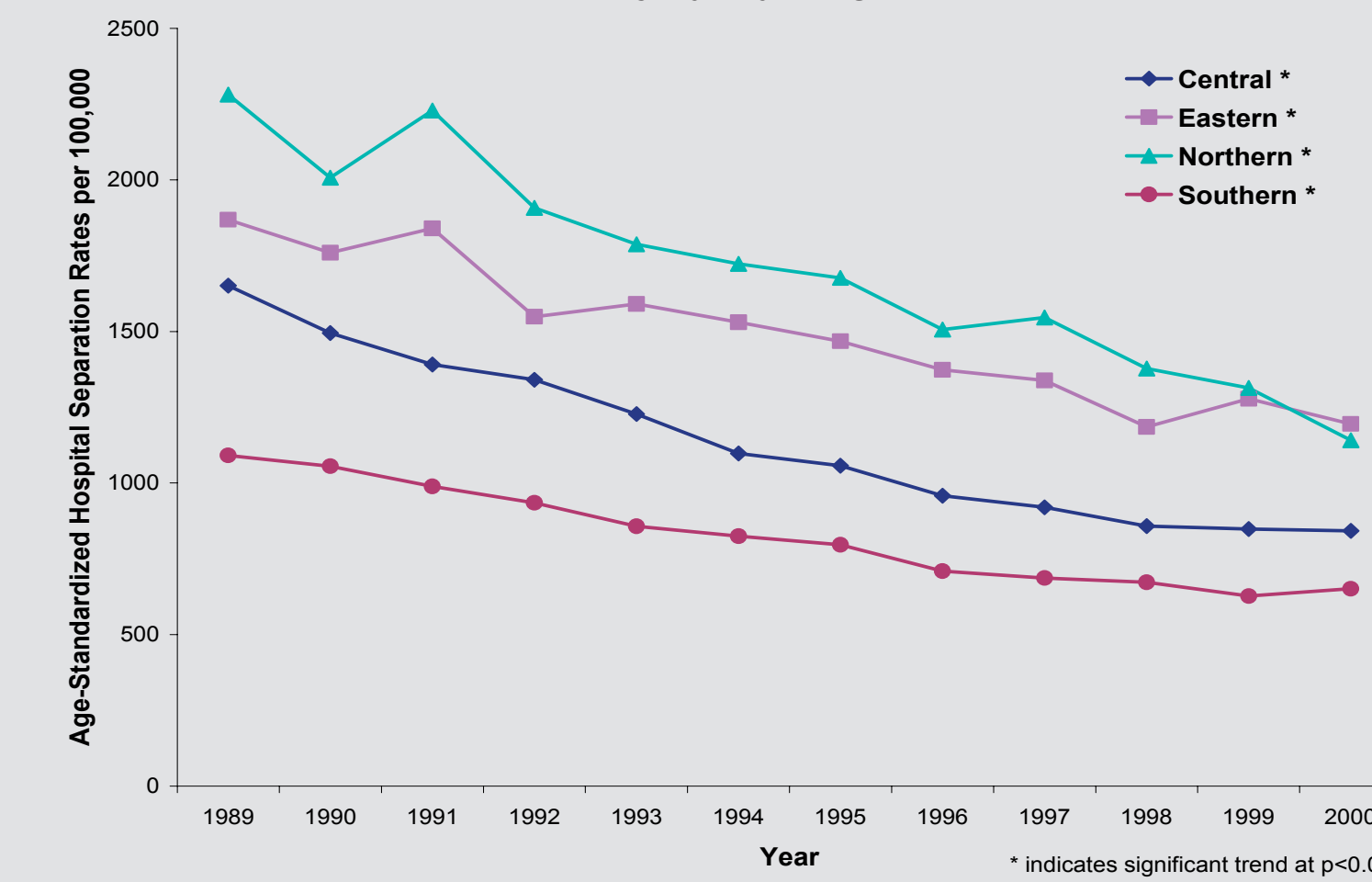
**CAPACITY BUILDING**

- Reinforce the political commitment to unintentional injury prevention within integrated strategies that address both environmental (physical and social) and health impacts of various social activities.
- Build and sustain injury research capacity through relevant training. Develop comprehensive research strategies fostering multidisciplinary collaboration and pooling of expertise and resources.
- Create and promote coordinated regional policies in the area of unintentional injuries.

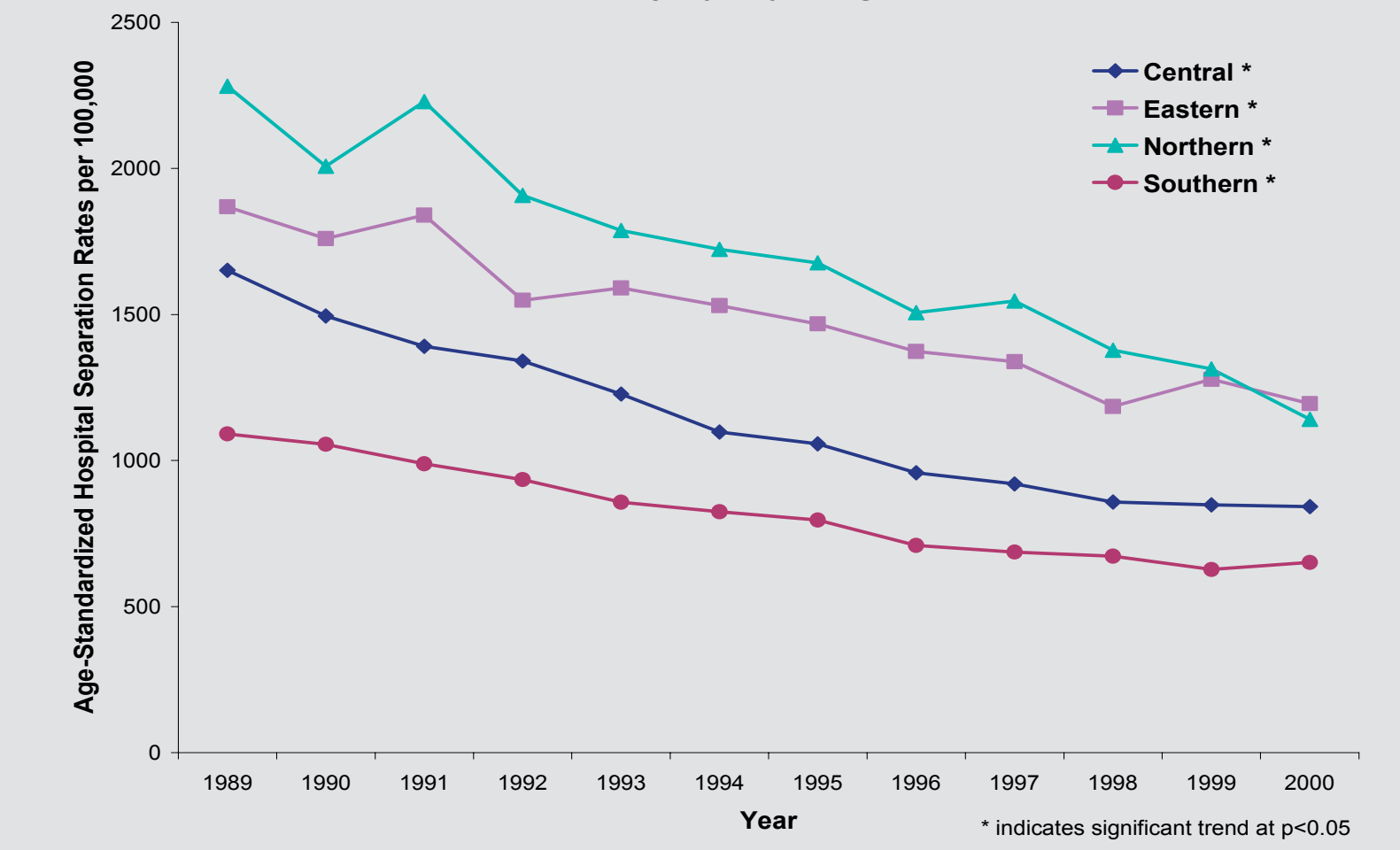
Trends for Age-Standardized Hospitalization Rates, All External Causes of Injury, by Region, BC, 1989, 1992, 1996, 2000



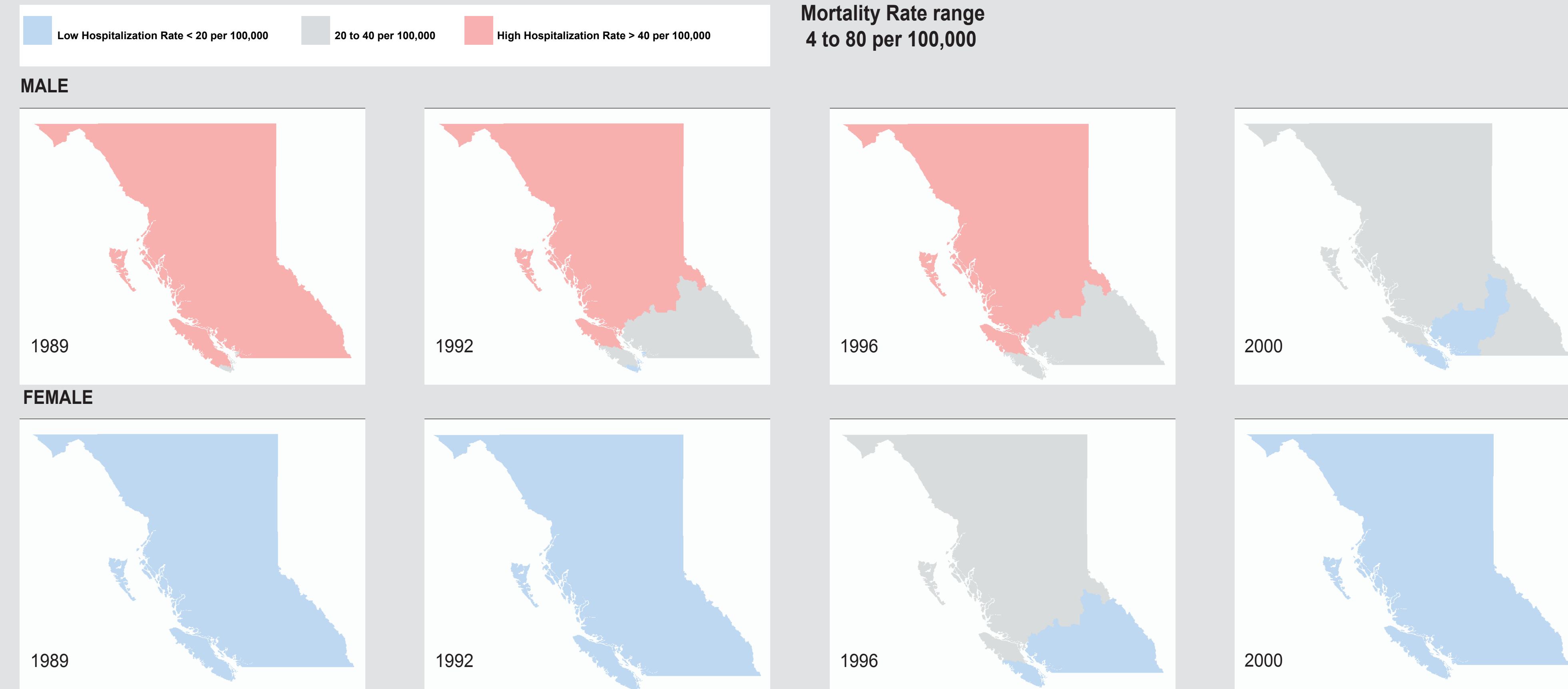
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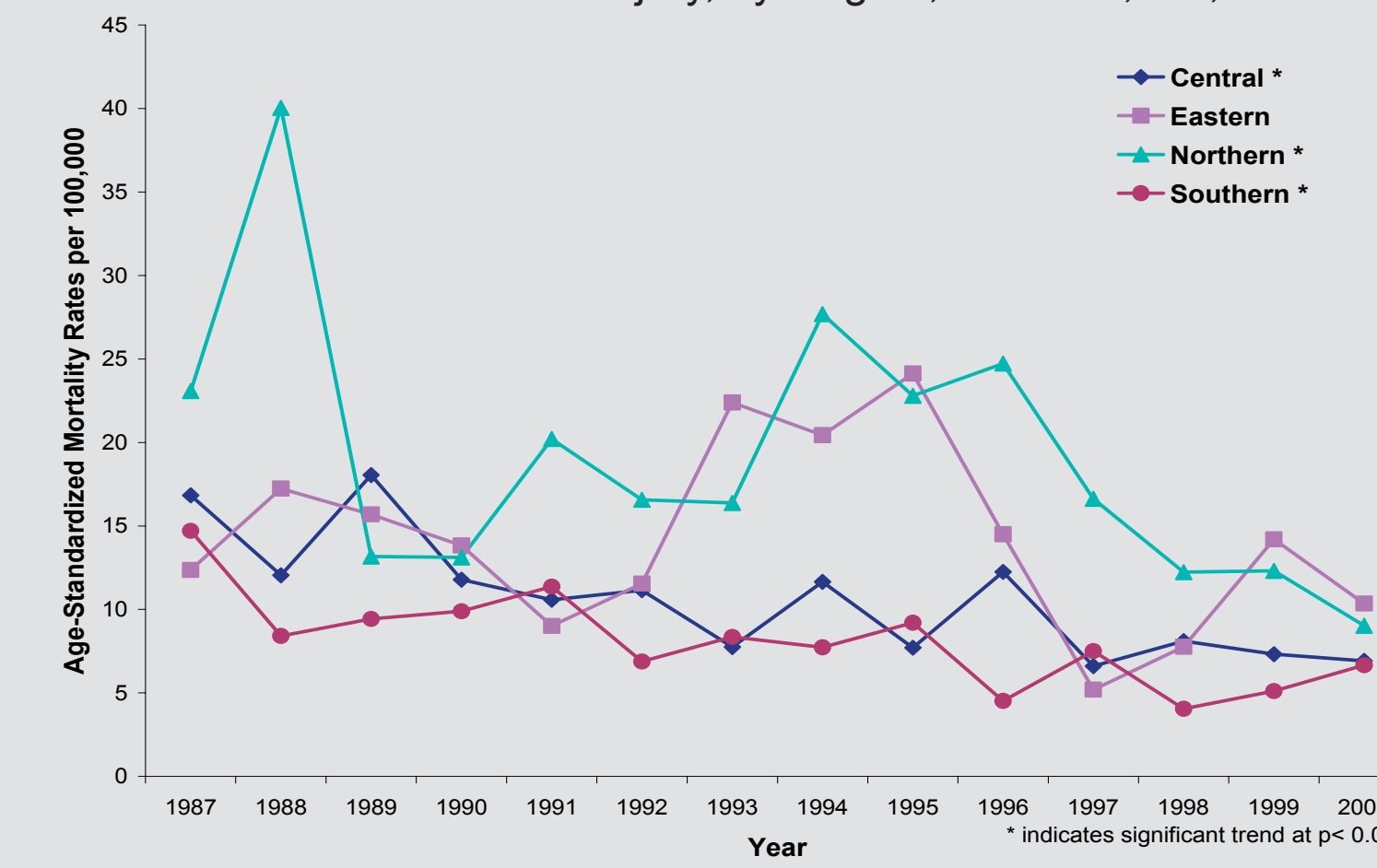
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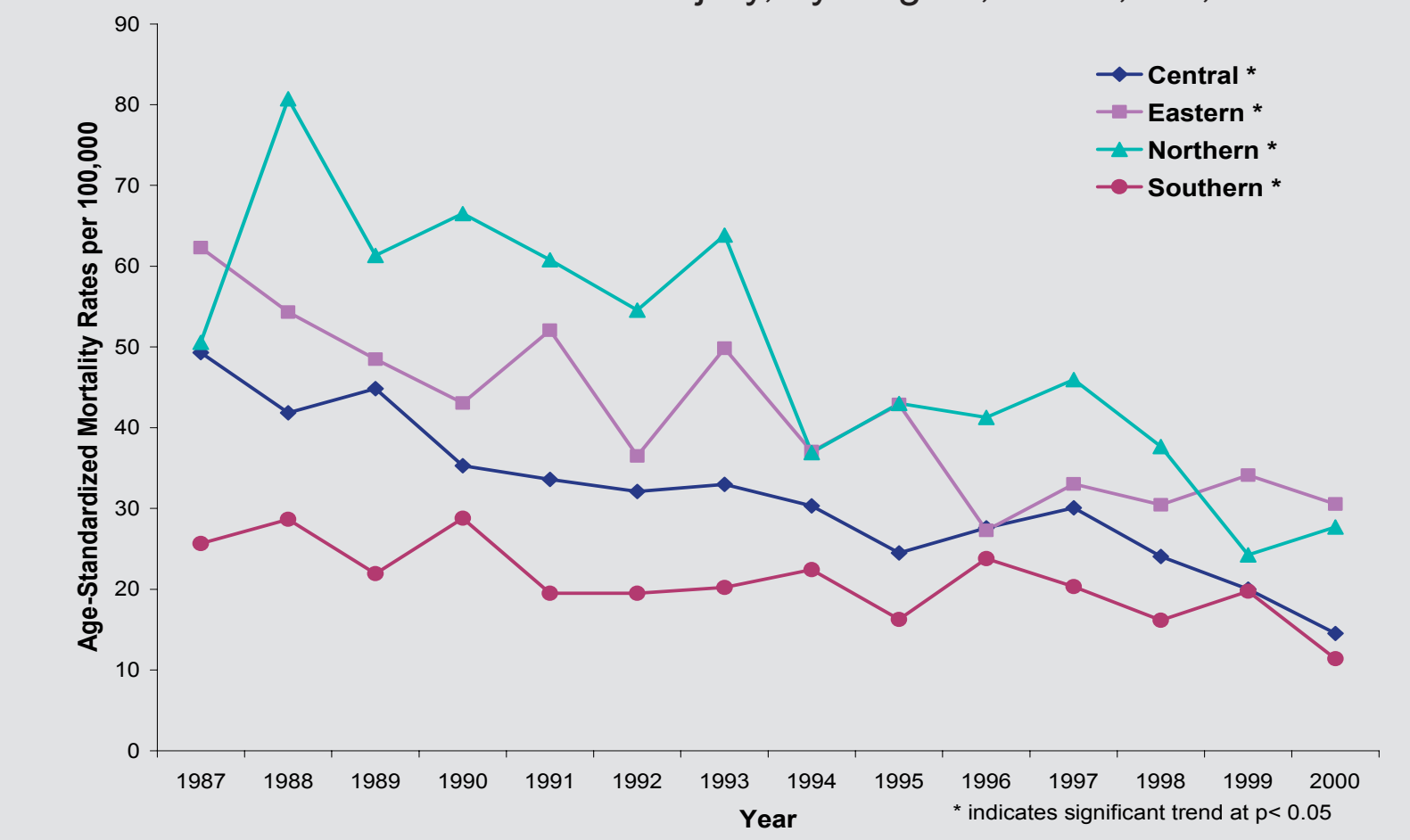
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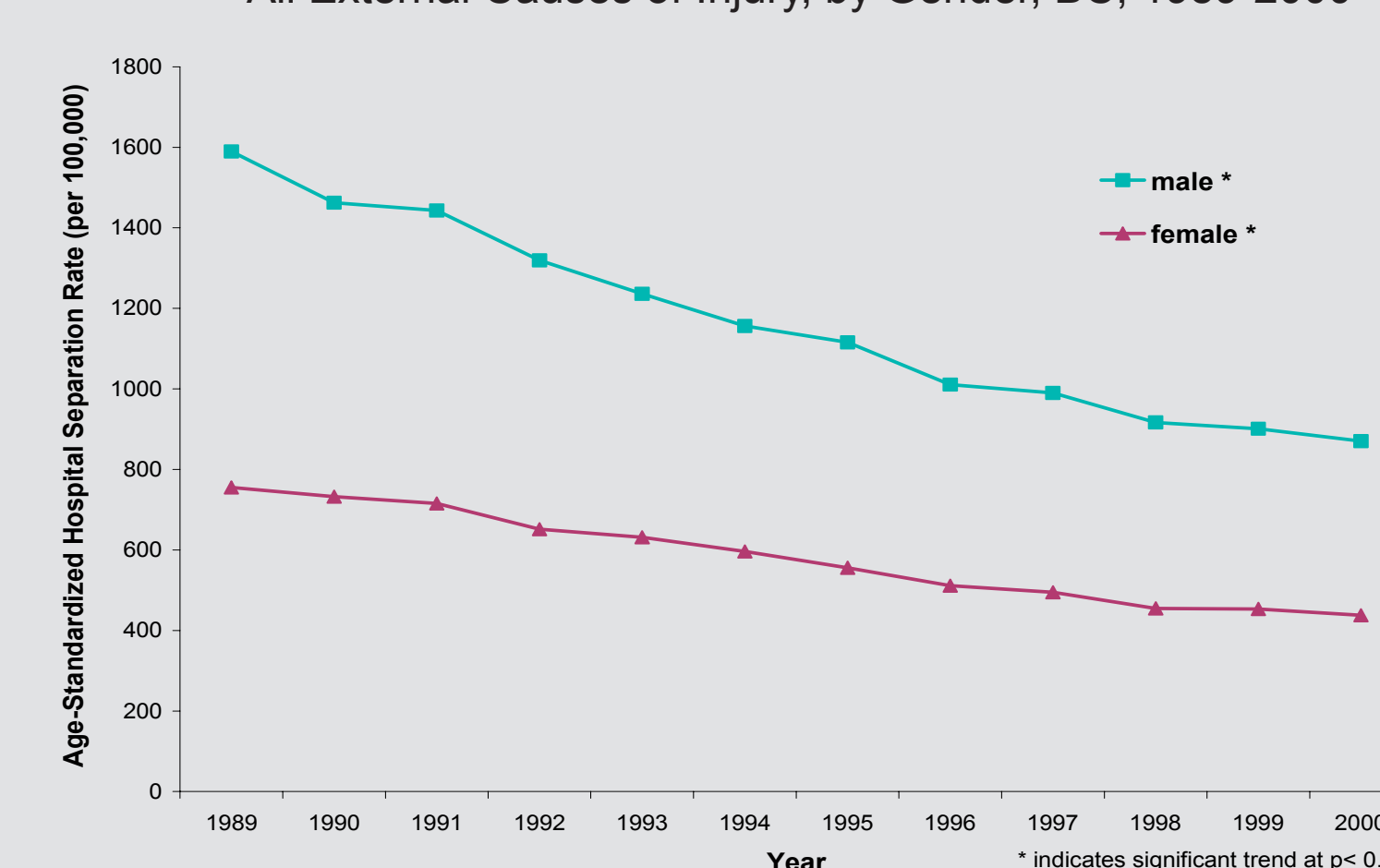
Trends for Age-Standardized Mortality Rates All External Causes of Injury, by Region, Females, BC, 1987-2000



Trends for Age-Standardized Mortality Rates All External Causes of Injury, by Region, Males, BC, 1987-2000



Trends for Age-Standardized Hospitalization Separation Rates All External Causes of Injury, by Gender, BC, 1989-2000



Trends for Age-Standardized Mortality Rates All External Causes of Injury, by Gender, BC, 1987-2000

