

Exploring Disparities in Motor Vehicle Traffic Accidents in the San Joaquin Valley

A Regional Partnership
Fresno, Madera, Kern, Kings, Merced and
Tulare Counties' Health Departments
And

Central Valley Health Policy Institute
Central California Center for Health and Human Services
California State University, Fresno

Partial support through



Transportation or Public Health Issue?

“Too often, road safety is treated as a transportation issue, not a public health issue, and road traffic injuries are called accidents, though most could be prevented. As a result, many countries put far less effort into understanding and preventing road-traffic injuries than they do into understanding and preventing diseases that do less harm.” (Dr. Lee Jong-Wook, 2004).

Background

▣ Prior research:

- **Motor vehicle related injury is the leading cause of death among persons 1–24 years of age in the United States** (National Center for Health Statistics, 2001).
- **Motor Vehicle injuries result in the largest number of years of potential life lost and cost more than any other type of injury or disease in childhood** (CDC, 2000)

Background

□ Prior research:

- > Higher rates of mortality in the San Joaquin Valley due to motor vehicle crashes, unintentional injuries, coronary heart disease, drug-related, and diabetes than in California and the Healthy People 2010 (HP2010) objectives (Bengiamin et.al. 2005).
- > In comparison with California, SJV Latinos had significantly higher mortality rates for the same causes as above except coronary heart disease (Bengiamin et.al. 2005).
- > We used Years of Potential Life Lost (YPLL) as a measure designed to emphasize premature mortality that is prevalent among persons under age 65 (CDC, 1986)

Comparison YPLL for selected causes <1 through 64 years

Causes of Death	SJV YPLL	SJV Index per 1,000 population	CA YPLL	CA Index per 1,000 population	Nation YPLL	Nation Index per 1,000 population
Diseases of Heart	18,833	5.4	132,694	3.7	1,434,511	5.0
Malignant Neoplasm	24,628	7.0	201,176	5.7	1,903,274	6.6
Accidents	34,969	10.0	215,385	6.1	2,159,266	7.5

Frequency of death and YPLL due to Accidents by race/ethnicity and age

Age Group	Hispanic		White		African American		American Indian		Asian/ Pac Isl.	
	YPLL	Index /1,000	YPLL	Index /1,000	YPLL	Index /1,000	YPLL	Index /1,000	YPLL	Index /1,000
0-11	2,380	6.9	1,249	5.6	178	5.8	5.5	1.3	22	.5
12-17	1,515	7.7	1,919	11.7	303	13.8	14.5	4.0	101	3.2
18-64	9,312	11.8	12,912	9.9	1,416	14.2	410	21.9	1,722	13.1
Total	13,207	9.9	16,080	11.5	1,897	12.4	430	16.4	1,845	8.9

Project Goal

Examine factors related to motor vehicle accidents' mortality/Morbidity in the San Joaquin Valley in order to implement effective solutions

Do we know what the Social determinants are in the SJV?

❑ We don't have a comprehensive framework as to what the social determinants are for the SJV.

BUT

❖ Based on our preliminary review of the literature potential determinants maybe under the umbrella of **Rural / Urban construct** which includes:

- Social Behavior
- Poverty
- Environmental Conditions
- Road Conditions
- Law Enforcement

Plan of Action

- Identify and Engage Partners
- Identify data sources
- Compile and organize data
- Analyze data
- Identify Key indicators
- Report preliminary findings
- Identify funding sources
- Develop concept paper for funding

Key Partners Engaged

- Six (6) counties (Fresno, Madera, Kern, Kings, Merced, Tulare) Public Health Directors.
- Central Valley Health Policy Institute, California State University-Fresno.
- Developing a plan to engage the Emergency Services directors and law enforcement agencies in our efforts.

Key Activities

- Schedule regular meetings with partners
- Contact EMS directors
- Contact California Highway Patrol
- Contact Attorney General
- Hire a Ph.D. researcher with relevant skills and experience in area of interest.

Resource Needs

- Funding
- Researchers
- Data
- Engage additional community partners
- Place Matters' Long-term commitment

What Have we Accomplished?

- Obtained permission from the California Highway Patrol Commissioner **Mike Brown** to inspect accident data in possession of the California Highway Patrol **Hanford** Office.
- Identified a comprehensive federal motor vehicle fatality data set called "**FARS** (Fatality Analysis Reporting System) through literature review and Web search.
- Continue to identify additional data sources

What Have we Accomplished?

- Identified Community partners
- Completed preliminary Literature review
- Identified at least 2 data sources
- Contacted Fresno County Coroner's office and requested and were granted access to data.
- Meeting with Partners to define strategy and develop concept paper.

Biggest Challenges

- Non-Traditional partnership between the Counties' Public Health Departments and The University
- Non-traditional topic not often thought of as public health issue
- Nature of the political organization of the region compared to the rest of California.
- Disparate nature of Motor Vehicle Traffic Accident data
- Identifying and developing relationships with relevant policy makers

Next Steps

- Collect and analyze data/develop indicators
- Identify barriers i.e. policy/solutions and indicators of/for change
- Identify funding sources for additional data collection and analysis

How can Place Matters help us Succeed?

- Long term commitment
- Assistance in identifying and securing funding
