



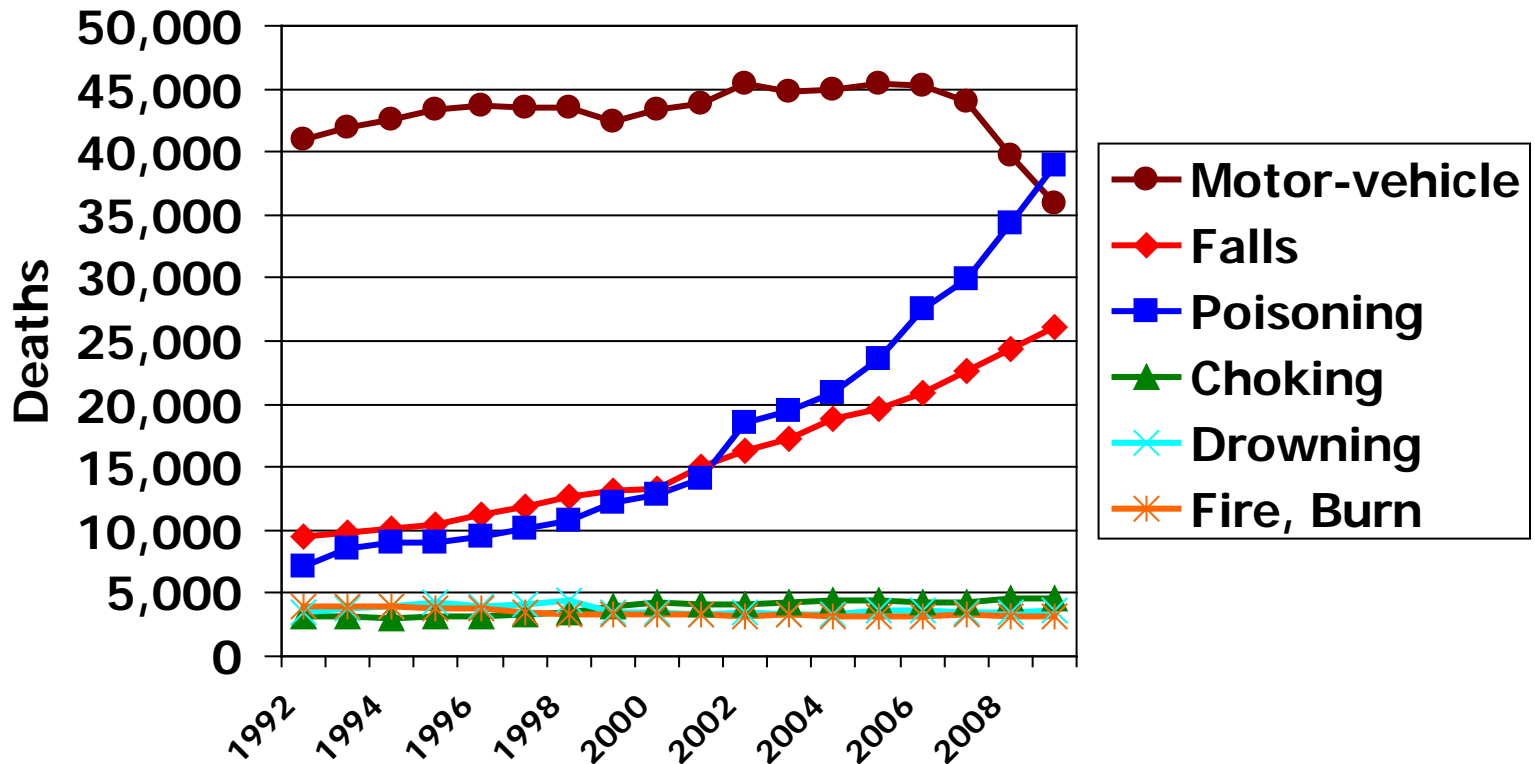
Are Safe Communities Safe?

An Exploratory Analysis

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Trends in Leading Causes





Limited Research Supporting the Effectiveness of Safe Communities

“there was no consistent relationship between being a WHO designated Safe Community and subsequent changes in observed injury rates.”

Cochrane Collaboration, 2009



NSC Mission

The National Safety Council **saves lives** by preventing injuries and deaths at work, in homes and communities, and on the roads, through leadership, research, education and advocacy.



Goal of This Study

Determine if counties represented by Safe Communities have lower fatal injury rates than other “similar” counties that are not represented by a Safe Community.



The Challenges

- Fatal injuries are fortunately rare events

But

This makes studying Safe Communities much more difficult

- Nonfatal injury data is difficult to get for specific geographic areas
- Formal evaluation take time, money, resources



What we had to work with

- County level fatality data from NCHS (combined for 2000 through 2006)
- County level demographic data (Census)
 - Population and population density
 - Per Capita personal income

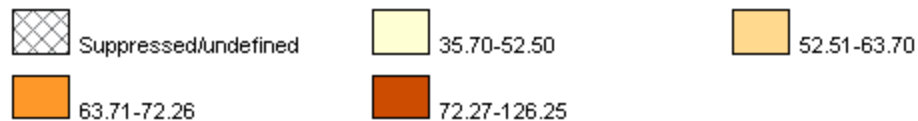
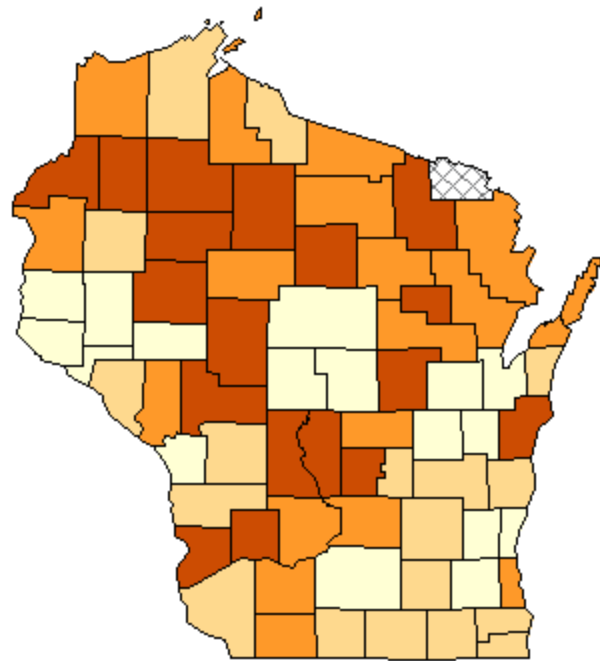


What We Did

1. Collected fatality data for each of the communities that represent a county or counties:
 - Anchorage, AK
 - Dallas, TX
 - Erie, PA
 - Lycoming, PA
 - Madison, KY
 - Madison, WI
 - Omaha, NE
 - Nebraska Panhandle
 - Springfield, MO

2000-2006, Wisconsin

Death Rates per 100,000 Population
 All Injury, All Intents, All Races, All Ethnicities, Both Sexes, All Ages
 Annualized Crude Rate for Wisconsin: 58.57





	A	B	C	D	E	F	G	H	I
19									
20									
21		ST	County	StateFIPS	CountyFIP	Population	Deaths	U_C_Rate	
22		WI	ADAMS	55	1	140978	120	85.11966	
23		WI	ASHLAND	55	3	116629	78	66.87874	
24		WI	BARRON	55	5	317897	202	63.54259	
25		WI	BAYFIELD	55	7	105155	63	59.91156	
26		WI	BROWN	55	9	1638480	779	47.54407	
27		WI	BUFFALO	55	11	96503	61	63.21047	
28		WI	BURNETT	55	13	112515	100	88.87704	
29		WI	CALUMET	55	15	300109	119	39.65226	
30		WI	CHIPPEWA	55	17	400518	306	76.40106	
31		WI	CLARK	55	19	235135	179	76.12648	
32		WI	COLUMBIA	55	21	375951	246	65.43406	
33		WI	CRAWFORD	55	23	118887	86	72.3376	
34		WI	DANE	55	25	3142525	1317	41.90897	
35		WI	DODGE	55	27	608157	341	56.07105	
36		WI	DOOR	55	29	196732	142	72.17941	
37		WI	DOUGLAS	55	31	305925	218	71.2593	
38		WI	DUNN	55	33	287293	145	50.47112	
39		WI	EAU CLAIRE	55	35	664019	301	45.33003	
40		WI	FLORENCE	55	37	34862			
41		WI	FOND DU LAC	55	39	686528	400	58.26419	
42		WI	FOREST	55	41	69405	51	73.48174	
43		WI	GRANT	55	43	344529	208	60.37228	
44		WI	GREEN	55	45	240318	144	59.92061	
45		WI	GREEN LAKE	55	47	132899	79	59.44364	
46		WI	IOWA	55	49	161869	108	66.72062	
47		WI	IRON	55	51	46407	26	56.02603	
48		WI	JACKSON	55	53	135865	103	75.81055	



What We Did (cont.)

2. Collected county level descriptive data for all counties in states with a Safe Community:
 - Per capita personal income
 - Population
 - Population density
 - Location of county relative to the Safe Community (adjacent or not)



What We Did (cont.)

3. Used multiple regression to identify which of the descriptive variables best predicted fatal injury rates.
 - Per capita personal income was found to predict fatal injury rates better than the other variables explored (12% of the variance).
 - Both population and population density were highly correlated with per capita income
 - Counties adjacent to Safe Community counties did not have more similar rates than did other counties in the state.



What We Did (cont.)

4. Used per capita income to identify the counties to compare Safe Communities to.
 - Counties within one standard deviation of the Safe Community's per capita income were used as the comparison group.
 - Conducted one sample T-tests to determine if fatal injury rates were statistically different than other counties with similar per capita incomes.



Results

(Rates per 100,000 Population)

	ALL		UI	
	Comparison Group	Safe Community	Comparison Group	Safe Community
Anchorage, AK	78.6	61.9*	45.4	37.8*
Dallas, TX	48.8	53.3	31.4	31.2
Erie, PA	62.3	50.5*	43.2	38.0*
Lycoming, PA	62.3	51.6*	43.1	39.7*
Madison, KY	86.4	55.0*	65.9	42.5*
Madison, WI	49.1	41.9	35.8	29.0
Omaha, NE	51.9	46.8*	38.4	28.6*
Nebraska Panhandle	65.3	75.3	51.0	57.3
Springfield, MO	67.4	67.0	45.0	47.2

* Statistically significant < .05



Results

(Percent Difference)

	ALL	UI
Anchorage, AK	-21%	-17%
Dallas, TX	9%	1%
Erie, PA	-19%	-12%
Lycoming, PA	-17%	-8%
Madison, KY	-36%	-19%
Madison, WI	-15%	-19%
Omaha, NE	-10%	-25%
Nebraska Panhandle	15%	12%
Springfield, MO	-1%	5%
AVERAGE	-10%	-9%



Conclusions

- Most Safe Communities included in this study had significantly lower fatal injury rates than comparable counties.
- Of those Safe Communities with higher rates, the differences were not statistically significant.
- Formal evaluations are needed to identify why Safe Communities have lower fatal injury rates.
- Additional work is needed to test other methods to identify comparable counties.
- As Safe Communities continue to mature longitudinal analysis should be conducted to see if Safe Communities improve over time.