

# Use of Child Safety Seats: Education Programs Alone

## Summary Evidence Tables

### Educational Programs for Parents

Study	Intervention/Comparison Elements	Study Population	Outcome Measure	Base-line	Effect	Follow-Up Time
<p><b>Author (Year):</b> Christophersen et al. (1985)</p> <p><b>Study Design:</b> Randomized clinical trial</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> 1981-1982 Hospital</p>	<p><b>Intervention:</b> Group I: Discussion in prenatal class; demonstration; handouts; standing orders for demonstration and existing loan program, discharge orders for restraint use; reinforcement</p> <p>Group II: loan program offered; discussion in prenatal class; discouraged from in arms travel. N = 129 mother-infant pairs</p> <p><b>Comparison:</b> No intervention for historical comparison group III (n=not stated)</p>	Perinatal women; middle/upper SES	<p>Observed correct use of child safety seats: Group I vs II</p> <p>Group I/II vs III</p>	<p>94%</p> <p>0%</p>	<p>-2%</p> <p>93%</p>	Discharge from hospital (all comparisons)
<p><b>Author (Year):</b> Goebel et al. (1984)</p> <p><b>Study Design:</b> Before-after</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> 1981-82 Hospital</p>	<p><b>Intervention:</b> Class-room instruction incorporated into ongoing obstetrical education program: question/answer, audiotape, car seat display and demonstration, pamphlet, shopper's guide</p> <p><b>Comparison:</b> Basic obstetrical program in the pre-intervention period N = 182</p>	Perinatal women, middle-upper SES	Observed correct use of child safety seats	8%	2%, not significant	Discharge from hospital
<p><b>Author (Year):</b> Tietge et al. (1987)</p> <p><b>Study Design:</b> Non-randomized clinical trial</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> Year of study unknown</p> <p><b>Evaluation Setting:</b> Hospital</p>	<p><b>Intervention:</b> Group 1: Closed-circuit television instruction and information about restraints. ·Group 2. Same as group 1 plus 5-minute one-on-one instruction and practice session</p> <p><b>Comparison:</b> no intervention N = 93</p>	First-time mothers 16-45 years of age, residents of CA, 10.8% Hispanic, 3.2% African-American	<p>Observed correct use of child safety seats</p> <p>Group 1</p> <p>Group 2</p>	<p>63.3%</p> <p>63.3%</p>	<p>5.5%</p> <p>10.9%</p>	Discharge from hospital (both arms)

**Educational Programs for Children**

Study	Intervention/Comparison Elements	Study Population	Outcome Measure	Base-line	Effect	Follow-Up Time
<p><b>Author (Year):</b> Arneson et al. (1990)</p> <p><b>Study Design:</b> Before-after</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> unknown</p> <p><b>Evaluation Setting:</b> Preschool</p>	<p><b>Intervention:</b> 5 day educational program "Riding with Bucklebear": songs, filmstrip, coloring activities, structured play, handouts and activities sent home (n=33 children observed)</p> <p><b>Comparison:</b> No program in pre-intervention period (n=35 children observed)</p>	Children 2.5-5 years old; 39% female; "predominantly white, middle class" in a mid-western city (population 50,000)	<p>Knowledge of automobile safety</p> <p>Observed correct use of child safety seats</p>		<p>t=3.6, p=0.002</p> <p>12%, x<sup>2</sup>=0.928, p=0.33</p>	<p>2 weeks</p> <p>2 weeks</p>

**Educational Programs for Professional Groups**

Study	Intervention/Comparison Elements	Study Population	Outcome Measure	Base-line	Effect	Follow-Up Time
<p><b>Author (Year):</b> Lavelle et al. (1992)</p> <p><b>Study Design:</b> Non-randomized community trial</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> 1987</p> <p><b>Evaluation Setting:</b> Police departments</p>	<p><b>Intervention:</b> Eight 30-minute training sessions during routinely scheduled officer briefings to improve enforcement of existing mandatory restraint law; officers able to give coupon for attendance at an educational session for non-compliant motorists along with the citation. Fine waived if driver attended session.</p> <p><b>Comparison:</b> No program available in pre-intervention period or in comparison community</p>	Police officers in Greeley, Colorado	Number of citations per month	0-10	10-20/month	6 months
<p><b>Author (Year):</b> Wolf et al. (1995)</p> <p><b>Study Design:</b> Before-after</p> <p><b>Quality of Execution:</b> Fair</p> <p><b>Study Period:</b> 1991-1992</p> <p><b>Evaluation Setting:</b> Hospital</p>	<p><b>Intervention:</b> Hospital Program portion of the Nebraska Cares Project: development of professional education materials; development of educational materials for starting a restraint loan program in hospitals; recommendations for hospital discharge policies</p> <p><b>Comparison:</b> No program available in pre-intervention period</p>	Nursing or obstetrical department directors at all hospitals with newborn delivery services in Nebraska	<p>Written policy for newborns</p> <p>Short term loan program available</p> <p>Patient education program available</p>	<p>25.9%</p> <p>58.8%</p> <p>51.2%</p>	<p>62.3%, x<sup>2</sup>=67.44, p&lt;0.001</p> <p>14.1%, x<sup>2</sup>=3.77, p&lt;0.05</p> <p>44.1%, x<sup>2</sup>=43.04, p&gt;0.000</p>	Unknown