

Appendix Table 6. Included Studies: Children Age 0 to 4 Years\*

Study, Year (Reference)	Target Behavior	Setting	Study Design; Location; Target Population	Study Population	Baseline Data on Use	Inclusion and Exclusion Criteria	Description of Intervention
<b>PC setting during WCC visits</b>							
Guyer et al., 1989 (36)	Child restraints; age 0–5 y Burns, poisonings, suffocations, falls	PC component and peripartum hospitalization	CCT; 14 communities in Massachusetts; families with children age 0–5 y	n = 286 676 Age: NR % male: NR % minority: NR SES: NR	49% using child restraints	Inclusion: ≥1 child in household age <19 y Exclusion: NR	IG: Concurrent implementation of 5 injury prevention projects conducted in health care settings and the community. Components targeting infant and child safety seat use included injury counseling by pediatricians during WCC visits for children up to age 5 y by using Framingham Safety Surveys and promotion of infant safety seat restraints for infants leaving maternity hospitals and in preschool-age children. CG: None of the 5 injury prevention projects were implemented. (Population had incidental participatory exposure to MVOI-related interventions: 14% at baseline and 34% at 2 y after intervention.) Exposure to the intervention was assessed through telephone survey respondents grouped into 3 groups.
Kelly et al., 1987 (27)	Infant car seat Other behaviors: home safety, such as fires and burns, falls, poisoning; drowning, suffocation, and choking; injuries due to sharp and heavy objects; electrical hazards	PC pediatrics	RCT; New Haven, CT; community hospital PC clinic	Overall: n = 171 Age: NR % male: NR % minority: NR SES: NR IG: n = 85 Maternal age: 23.4 y % male in household: 18 % minority: 96 SES: 91 receiving welfare CG: n = 86 Maternal age: 23.6 y % male in household: 20 % minority: 93 SES: 94 receiving welfare	NR	Inclusion: Attendance at primary care clinic for infant WCC visits Exclusion: Did not continue WCC visits because of poor adherence, moving, or changing to another physician	IG: 3-part series of age-appropriate, tailored safety information requiring active parent participation given by physician at 6-, 9-, and 12-mo WCC visit. CG: Routine safety information was given as part of WCC visits.
Liberato et al., 1989 (28)	Infant and child car seats	PC pediatrics	RCT (randomized clinics); Phoenix, AZ; 6 randomly selected county outpatient care clinics, medically indigent, 66.9% minority	n = 900 people (observed driving in the clinic parking lot) Age: NR % male: NR % minority: NR SES: NR	IG, 25.1%; CG, 12.2%	Inclusion: Parents of children age 0–4 y receiving outpatient care at clinic Exclusion: Did not drive to clinic	IG: Parking lot drivers with unrestrained children (age 0–4 y) were given a printed warning, recommended to obtain a safety seat, and advised to avoid a city citation fee by contacting the health educator who would encourage attendance at a formal class. Drivers with restrained children were given sunshades. Buckle-up stickers and cups with information were distributed in waiting rooms; waiting room presentation participants were given sunshades; bulletin boards displayed information. Clinic staff (not physicians) provided verbal reinforcement and incentives when subject arose. Monthly 1-h meetings by health educator and lottery drawing of a car seat. CG preintervention: Patients received usual care in maternity clinics and WCCs on the importance of safety seats.

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Study, Year (Reference)	Target Behavior	Setting	Study Design; Location; Target Population	Study Population	Baseline Data on Use	Inclusion and Exclusion Criteria	Description of Intervention
Reisinger et al., 1981 (37)	Infant car seat	PC postpartum and PC WCC visit	CCT; Pittsburgh, PA	Overall: <i>n</i> = 269 Age: NR % male: 0 % minority: NR, "almost entirely white" SES: "middle and upper middle class" IG: <i>n</i> = 127 Age: 27 y % male: 0 % minority: NR CG: <i>n</i> = 142 Age: 26 y % male: 0 % minority: NR	NA	Inclusion: Requested 3 pediatricians within a group practice and came in for ≥1 follow-up visit Exclusion: NR	IG: Received education on infant car seat delivered by physician-pediatrician at postpartum hospital stay and WCC visits at 1 mo and 2 mo. Pamphlet and formal prescription at postpartum visit; tailored message at 1 mo and 2 mo; demonstration by pediatrician of seat use at 1 mo. CG: Received educational messages that did not include car seat use.
Scherz, 1976 (38)	Infant car seats	PC pediatrics	CCT; WCC in a U.S. Army medical center in Tacoma, WA	<i>n</i> = 500 Age: NR % male: NR % minority: NR SES: NR	NR	Inclusion: Attendance at 4-wk WCC visit Exclusion: NR	IG4: Display, pamphlet, 1–5 min with physician-pediatrician encouraging purchase of infant car seat. IG3: Display, pamphlet, 1–2 min from registered nurse encouraging purchase of infant car seat. IG2: Display and pamphlet. IG1: Information display only. CG: No stimulus.
<b>Antepartum PC setting only</b> Alvarez and Jason, 1993 (29); study 2	Infant car seats	PC prenatal visit	RCT; Chicago, IL; low-income Hispanic population	<i>n</i> = 14 Age: NR % male: 0 % minority: 100 SES: 2 single mothers on public assistance, 12 married women whose husbands were laborers	13 of 14 infants were not restrained in a random sample of newborns at same clinic	Inclusion: NR Exclusion: NR	IG1: At a prenatal visit during the last month of pregnancy with an unspecified type of provider, participants received discussion of Illinois child passenger legislation, an explanation of the benefits of automobile restraint devices along with behavior modification strategies for use, a list of available infant and toddler restraints, and a demonstration of appropriate use of 1 type of restraint. At initial visit, participants received an infant automobile restraint device on loan for 5 mo for a \$10 deposit. IG2: Same as above, but the restraint device was made available at the 6-wk postpartum visit instead of during the last month of pregnancy.
Serwint et al., 1996 (30)	Infant car seats	PC prenatal pediatrics Breastfeeding; emergency department visits; circumcision; health maintenance; mother–pediatrician relationship	RCT (block randomization); urban, hospital-based, resident clinic; low-income, primarily African-American families	Overall ( <i>n</i> = 156) IG: <i>n</i> = 81 Mean age: 20.2 y (SD, 2.1) % male: 0 % minority: 91 African American SES: 98 (medical assistance) CG: <i>n</i> = 75 Mean age: 20.7 y (SD, 2.5) % male: 0 % minority: 91 African American SES: 95 (medical assistance)	NA	Inclusion: Nulliparous women, age ≥18 y, fetus of gestational age ≤28 wk, not yet selected a pediatrician Exclusion: Admitted to prenatal drug use, had a recognized psychiatric illness, or had HIV	IG: Had a prenatal visit with a pediatrician scheduled between 32 wk and 36 wk of gestation; received a welcome letter to the pediatric clinic with a brochure for proper health care utilization; counseled by a postgraduate year–2 pediatric resident on multiple anticipatory guidance topics if attended visit. CG: Not offered a visit; received card with future pediatrician information, welcome letter, and brochure.
<b>Peripartum inpatient setting only</b> Christophersen and Sullivan, 1982 (31)	Infant car seats	Peripartum hospitalization	RCT; suburban Kansas City, MO, hospital	<i>n</i> = 30 Age: NR % male: 0 % minority: NR SES: NR (see comments)	NA	Inclusion: Delivered a single live-born infant; baby's physician within 10 miles Exclusion: NR	IG: Discharge staff person brought in a free loaner car seat at time of discharge and then offered to demonstrate proper infant placement in seat before leaving room, carrying infant in seat, and correct restraining with lap belt in family's vehicle; if mother declined, no further effort was made. CG: Usual care.

Appendix Table 6—Continued

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Lindqvist, 1993 (39)	Infant car seats	Peripartum hospitalization	CCT (group-level); Sweden; 3 community hospitals in smaller cities	Overall: n = 1157 Age: NR % male: 0 % minority: NR SES: NR IG: n = 764 SES: 97.9% car ownership CG: n = 393 SES: 96.4% car ownership	NA	Inclusion: Live birth at the participating hospitals during the test period Exclusion: NR	IG: An infant car seat was loaned free of charge during the mother's postpartum inpatient hospitalization; maternity ward staff demonstrated the use of the seat and parents viewed videotape; seats were returned at 9 mo. CG: Usual care.
Reisinger and Williams, 1978 (40)	Infant car seats	Peripartum hospitalization	CCT; Pittsburgh, PA; couples before postnatal discharge	n = 1103 Age: NR % male: 0 % minority: NR SES: NR	NA	Inclusion: Delivered live baby within the study period Exclusion: Babies who were to be adopted, those whose babies died, did not speak English or were deaf, no car ownership, were not discharged before next treatment group was initiated	IG1: Received 2 pamphlets from research staff with training on child safety seat use and given in-room access to purchase car seat; seat delivered to room and correct use demonstrated for women who purchased it. IG2: Same as IG1, but also visit from health educator on use of car seat. IG3: Same as IG1 and offered free car seat. CG: Car seats available for purchase in gift shop.
Tietge et al., 1987 (41)	Infant car seats	PC peripartum hospitalization	CCT; major community hospital in San Diego, CA	n = 93 Age: NR % male: 0 % minority: 16 (calculated value) SES: 73.29% had some college education or more; 65.6% had income ≥\$2000/mo	NA	Inclusion: First-time mothers, gave consent, or were discharged during experimental period Exclusion: Could not verify that participant viewed video, or video was not viewed at discharge	IG2: Watched 14-min video from Physicians for Automotive Safety (including demonstration of proper use of infant safety seat) and 5-min, face-to-face instruction session, which included practice by participant. IG1: Viewed video. CG: Given no safety seat information.
<b>PC-R education courses</b> Barone, 1988 (32)	Car seat	PC-R parent education classes Other behaviors: water temperature, smoke detectors	RCT (group-level); suburban Kansas City, MO, medical center; parents who elected to participate in a continuing education series	Overall: n = 79 couples or individuals IG: n = 41 couples or individuals Mean age: 32 y (mother), 34 y (father) % male: NR % minority: NR SES, education: mean, 2.98† SES, income: mean, 4.7‡ CG: n = 38 couples or individuals Mean age: 32 y (mother), 33 y (father) % male: NR % minority: NR SES, education: mean, 2.87† SES, income: mean, 4.54‡	NR for IG and CG	Inclusion: Participation in toddler education class, consented to a home visit and safety assessment, attended health and safety education presentation, lived in dwelling where they could control the setting of the water heater, not engaged in major water use 2 h before home visit Exclusion: NR	IG: Viewed home safety slides; slides addressing water temperature, smoke detectors, and child restraints; 6-min film on crash tests of restrained and unrestrained children; received education packet and digital thermometer. CG: Viewed home safety slides only.
Goodson et al., 1985 (42)	Infant car seats	PC-R prenatal classes	CCT (group-level); San Francisco, CA; prenatal couples	Overall: n = 163 Age: NR % male: 0 % minority: NR SES: NR Hospital A: n = 67 Age: NR % male: 0 % minority: 24 SES: Median education, 16 y Hospital B: n = 69 Age: NR % male: 0 % minority: 77 SES: Median education, 12 y	Seat belt use of parents: hospital A, 6% never wear; hospital B, 38% never wear	Inclusion: Attendance at hospital prenatal class Exclusion: No car ownership	IG: Half-hour lecture given by social worker, including a discussion; demonstration of correct use of infant safety seat with a doll; 10-min film by the Insurance Institute for Highway Safety that illustrated crash results of unrestrained infant; question-and-answer session; and brochures. CG: Usual cursory mention of child passenger safety.

\* CCT = controlled clinical trial; CG = control group; IG = intervention group; MVOI = motor vehicle occupant injury; NA = not applicable; NR = not reported; PC = primary care; PC-R = referable to primary care; RCT = randomized, controlled trial; SES = socioeconomic status; WCC = well-child care.

† SES education of 2 = high school; SES education of 3 = baccalaureate.

‡ SES income of 4 = \$31 000–\$40 000 per year; SES income of 5 = \$41 000–\$50 000 per year.