TRAUMA CENTRE-BASED SURVEILLANCE OF NON-TRAFFIC PEDESTRIAN COLLISION INJURY AMONG YOUNG CHILDREN IN CALIFORNIA

T M Rice*, R B Trent, K Bernacki, J K Rice Correspondence: Safe Transportation Research & Education Center, University of California, 2614 Dwight Way, #7374 Berkeley, CA 94720, USA

10.1136/ip.2010.029215.358

Objective Every year in the US, thousands of young children are injured by passenger vehicles in driveways or parking areas. Little is known about risk factors, and incidence rates are difficult to estimate because ascertainment using police collision reports or media sources is incomplete. This study used surveillance at trauma centres to identify incidents and parent interviews to obtain detailed information on incidents, vehicles and children.
Methods Eight California trauma centres conducted surveillance of non-traffic pedestrian collision injury to children aged 14 years or younger from January 2005 to July 2007. Three of these centres conducted follow up interviews with family members.

Results Ninety-four injured children were identified. Nine children (10%) suffered fatal injury. Seventy children (74%) were 4 years old or younger. Family members of 21 victims from this study (23%) completed an interview. Of these 21 interviewed victims, 17 (81%) were male and 13 (62%) were 1 or 2 years old. In 13 cases (62%), the child was backed over, and the driver was the mother or father in 11 cases (52%). Fifteen cases (71%) involved a sport utility vehicle, pick-up truck or van. Most collisions occurred in a residential driveway.

Conclusions Trauma centre surveillance can be used for case ascertainment and for collecting information on circumstances of non-traffic pedestrian injuries. Adoption of a specific external cause of injury code would allow passive surveillance of these injuries. Case–control studies are needed to understand the contributions of family, vehicular and environmental characteristics and injury risk to inform prevention efforts.