9.8% in houses of 6 or more. Large households had higher odds of unspecified injuries (OR: 1.85), including acts of violence, compared to households with 5 or fewer members. Odds of burn decreased with household size increase (OR: 0.833).

Conclusions Household size is a component of socioeconomic status; our data shows it is associated with insurance and alcohol usage. Risk of certain injuries is associated with household size. Further research needs to assess where these injuries are occurring, such as work or home. More in-depth research is also needed on how household size affects the family member occupations, as this places them at higher risks for different forms of injuries.

613 PRELIMINARY REPORT OF THE CINCINNATI HOME INJURY PREVENTION AND LITERACY PROMOTION TRIAL: INJURY HAZARD REDUCTION

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Background Injury in the home is a leading cause of morbidity and mortality for US children.

Objective Test the efficacy of the installation of safety measures on injury hazard reduction in homes of high-risk mothers and infants.

Methods Of the 1,589 mothers referred by the Every Child Succeeds home visitation program, 650 (41%) were eligible. Block randomization was used to assign households to the safety product installation intervention or control group. At the baseline home visit (BHV), a survey of 4 rooms (kitchen, main activity room, child's bathroom and bedroom) was conducted using a validated instrument. Inter-rater reliability of research assistant assessment of hazards was undertaken on a random sample of 100 homes. The number and density (number of hazards per 100 sq. ft.) of hazards were quantified at baseline, 12- and 24-month follow-up visits. Statistical analysis included Pearson correlation, analysis of variance, and Kappa statistics.

Results We randomly assigned homes of mother-child dyads to experimental, (N = 324) or control (N = 326) groups. Most homes were single story (60%) and had a mean of 958 sq.ft. (s.d. 529) and 9 rooms (s.d. 3); 238 were single family (37%), 276 were apartments (43%) and the remainder multi-family homes (21%).

Inter-rater reliability for the mean number and density of injury hazards was 0.81 and 0.93 respectively, for the 4-rooms assessed within hours of each other. For individual hazards, kappa scores ranged from 0.69 for visible sharps on accessible surfaces <1 metre from the floor to 0.96 for fire escape ladders available and accessible on 2nd floor, and 0.99 slats of infant cribs >0.6 cm apart.

At the BHV there were no significant differences in the mean number ($p = 0.28$) or density of injury hazards ($p = 0.31$) by group assignment. At the 12- and 24-month follow-up there were significant differences in the number ($p < 0.001$) and density ($p < 0.002$) of injury hazards by group assignment. In the intervention arm, the mean number of hazards for the 4-room sample was reduced from 41.8 (95% CI: 41.0, 42.6) to 33.6 (95% CI: 32.7, 34.6) at 12-months ($p < 0.001$) and 32.5 (95% CI: 31.5, 33.5) at 24-month home visit ($p < 0.001$).

Conclusions An intervention to reduce exposure to injury hazards in the homes of low-income mothers and their infants recruited from a home visitation program significantly reduced the number and density of injury hazards through 24-months of follow-up.

614 CAN USERS' OPINIONS HELP TO IMPROVE TRAFFIC CALMING INTERVENTIONS?

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Background Traffic calming interventions attempt to reduce accidents, improve mobility of users and enhance the liveability of the local environment. Speed limit reductions and adaptation of the infrastructure are some actions frequently implemented. Results of these types of interventions can be explored by analysing users' opinions, such as their needs and preferences before, during and after the intervention.

Methods A survey was performed to explore the effects on infrastructure remodelling of the Cartuja Campus at the University of Granada in Spain. Habits, opinions and attitudes from a total population of 21,892 users were collected. A total of 393 users from a stratified random sample took part in this study. The user groups included were: "residents on campus", "workers of nearby shops", "students", "teaching and research staff", "administration and service workers", and "parents and teachers of a school located on the campus". A questionnaire was used to collect the users' opinions in four basic areas: mobility, environment, safety and informing users about the objectives of the engineering works.

Results Results found that the following issues were considered to be very important and necessary for the user: an improvement of fluidity and functionality of public transport, accessibility to the campus for both pedestrians and vehicles, perceived road safety conditions and usability of the campus. However, users considered themselves to be poorly or not informed regarding the aims, planning and developing of the engineering works, and during the implementation of works, 22.1% of them reported to have changed their mean of transportation as a result of that engineering activity. The key groups affected by the changes were students, campus workers and users of the school.

Conclusions This current survey, taking place during the engineering interventions, will subsequently serve as baseline for the second phase once the infrastructure remodelling work in completed. In particular it will analyse the impact on mobility of the Campus Cartuja remodelling, evaluate the success of the "traffic calming" measures, and investigate if healthy mobility has been successfully encouraged. From these combined results, implications about road design and planning will be derived, as well as additional suggestions for improving traffic calming: these will be reported back to the infrastructure designers and used to further refine the infrastructure changes.

615 BUILT ENVIRONMENT AROUND HIGH SCHOOLS IN GALLE, SRI LANKA: AN OBSERVATORY STUDY

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