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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Background Road traffic injuries have reached epidemic proportion in Sri Lanka with rapid urbanisation and motorization. Due to inadequate consideration, adolescents are forced to share their transportation and recreational space with vehicles. The objective of this study is to assess the built-environment around schools in Sri Lanka.
Methods An observatory study was conducted around 16 high schools in Galle, Sri Lanka. Researchers observed the road conditions and road facilities, and measured the density of vehicles and pedestrians during the school rush hour. A cross-sectional survey was conducted among adolescents from these 16 schools, through which students self-reported their experience of road traffic crashes in the past 6 months. Descriptive analysis and regression model were performed by using STATA. The study was approved by IRB at Duke University and Ruhuna University.
Results The built-environment observation showed that although over 80% of roads around 16 schools were fully paved, 62.5% roads were narrow due to high pedestrian density and parked vehicles. 18.8% of roads were one-way road and 37.5% of roads didn't have clear directions and lanes. Only 18.8% roads had formal road shoulders to separate pedestrians from vehicles. 56.3% of schools had a policeman in front of the school gate to control the traffic, but none of the roads had a traffic light to control the vehicles and pedestrians. The regression model showed that after control the school and gender, one-way road (OR: 0.80, 95% CI: 0.68, 0.95) and having curve (OR: 0.79, 95% CI: 0.71, 0.89) are protective factors that significantly associated with adolescents' involvement of the crashes.
Conclusions The current built environment around schools in Galle, Sri Lanka is poor. A comprehensive strategy including improving the built environment with the consideration of vulnerable road users is promising to protect adolescents from road traffic injuries.

Safe Communities

Post Mon 1.21

616 ENHANCING VOLUNTEER TRAFFIC POLICE .TO PREVENT PROBLEMS OF ROAD ACCIDENTS IN THE COMMUNITY

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Background In 2012 NBLP community dead 86 people and 5,782 were injured from traffic accidents. Most incidents (70%) occurred at the community roads and motorcycle were the major causes. The victims were mostly young people who were the main worker of the families. They were mostly careless in driving; drunk driving, motorcycling without helmet and speed driving. In addition, there were insufficient officers to regulate manage traffic systems in the community
Solving measures to enhance people participation in traffic management by developing local traffic rules and set up volunteer patrol in the community in order to promote safe driving behaviours in the community. Objectives 1.To enhance people participation to help solve problems of traffic accidents in the community 2. To develop safe driving culture in the community in order to reduce injuries and deaths from traffic accidents.
Operations The local police authorities discuss with community leaders in order to set local driving rules such as speed limit, no drunken drivers and putting on helmets all the time for motorcycles. They also investigate black spots. Most importantly, recruit volunteer for traffic patrol and control training. This includes learning about traffic rules, traffic signals, the use of alcohol checking equipments and technique on checking on road vehicles. After training, all volunteers had been appointed by local police stations to take part in traffic regulating activities at the check points as well as patrolling. It is important to note that the traffic regulating operation has to be compiled to community rules and cultures
Outputs In 2012, NBLP provinces has developed over 800 volunteers who could take part in traffic management. The measures had solved the problems of inadequate police staffs to manage local traffic systems. As a results, the local traffic accidents reduced by 60% and people have become aware of the problems and willingly to participate in the agreed rules and regulation measures.
Outcomes Major achievements were the increase in people awareness and participation. The operations had been accepted by local government who now sponsored the volunteer training program and continue integrated road traffic prevention programs with other agencies in NBLP. Moreover, the training and the development traffic volunteer model has been adopted in many provinces. at present, there are more than 20,000 volunteers traffic police in Thailand.

617 ADVOCACY OF COMMUNITY ACCIDENT PREVENTION (COMMUNITY TRAFFIC SAFETY CHECKPOINT) DURING SONGKRAN FESTIVAL IN THAILAND , 2015

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Abstract This study aims at examining the factors causing traffic accident at the community level and finding measures for accident prevention and accident-related risk behaviour reduction to ensure safety of people in the community. At the community level, the accident prevention consists of finding risk group, risk area, establishing community traffic safety checkpoint which is to stop and reduce risk behaviour. The data was collected by Questionnaires and observation of traffic-related risk behaviour among car and motorcycle users passing through the checkpoints in Surat Thani, Chiangmai, Phrae, Chiangrai, and Konkean during Songkran Festival in 2015. The result shows that during 9–15 April 2015 of Songkran Festival (data from 10 provinces, 22 districts), there were 121 injuries, 6 of them had to be admitted to the hospital and there was no death.

Compared to 2014, death reduces by 5, injury reduces by 553, and number of crash victims who were admitted to the hospital reduces by 20. Also, it is found that traffic accidents heavily occurred on 12–14 April. From Alcohol breath test results, it is highlighted that alcohol level of drivers is especially high during 9–13 April. With regard to helmet wearing behaviour, the community traffic safety checkpoints used various measures to reduce helmet non-wearing behaviour among motorcycle riders who didn't wear helmet such as lending a helmet to them and prohibiting them from passing through the checkpoint unless they came back wearing a helmet. Community traffic safety checkpoints were operated by following 3. The evaluation underlines that there was preparation of community accident prevention (97.90%); there were community checkpoints to stop risk group and reduce accidents (100%); and there was monitoring for