BLL ≥ 15 mcg/dl were tested and compared for significant of IQ and learning disability differences.

Results Eighty six of children were enrolled. The multiple logistic regression showed the association between high BLL and school duration more than 4 academic years (p-value = 0.02), father's occupation related with lead (p-value = 0.044) and the distance between home and the factory <500 metres (p-value = 0.029). Children with BLL ≥ 15 mcg/dl, we found that prevalence of low IQ was 25% and of learning disability was 66.7%.

Conclusions High blood lead level among children associated with living at home, attending in the school nearby the lead pollution factory, and father's occupation related with lead. The prevalence of low IQ and learning disability among children with BLL ≥15 mcg/dl was higher than average of Thai children. Screening blood lead level among children in industrial area is necessary.

969 TAKE ACTION TODAY – PUT THEM AWAY

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10.1136/injuryprev-2016-042156.969

Background Every year thousands of infants need medical care for poisoning from products commonly found around the home. Whilst long term injury is rare, the distress caused and the impact on hospital services could be avoided by increased awareness. Because of their inquisitive nature, most accidental poisonings happen to children under-five, predominantly aged one to three.

Description RoSPA set up a major pilot programme in 2013 to prevent child accidents in the home from cleaning products. Launched in six cities and delivered through at least 120 local partners, the programme provided risk assessment tools and materials, which equiped both professional and consumers with skills and knowledge to ensure they were able to recognise potential dangers. The scheme provided families with a free handy magnet pad featuring safety advice.

Results professionals benefitted from receiving education, while 240,000 families received advice and resources. Media coverage reached over 4 million people via television, radio and newspapers. Social Media was also at the heart of this campaign. Evaluation included a survey of both practitioners and families with positive feedback in the awareness of dangers and behaviour change. Early indications show that in the cities targeted, there has been a drop in the number of children attending emergency departments due to poisoning.

Conclusions The programme educated professionals and families on poisoning dangers in the home and has seen an initial reduction in hospital admissions in target areas. People were more receptive to educational resources that fit into their lifestyle and home. A majority of families also said they had taken action or shared safety messages after their encounter with the programme.

970 FREQUENCY OF PATIENTS PRESENTING IN EMERGENCY ROOM WITH METHANOL POISONING AND THEIR AND OUTCOMES

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10.1136/injuryprev-2016-042156.970

Background Methanol toxicity may cause severe morbidity and mortality if not treated timely. These alcoholic drinks are generally very cheap and are therefore attractive to people with low incomes.We have seen cases of methanol poisoning outbreaks in our population several times but no work has been done so far to estimate the methanol exposure and its outcome complications.

Methods This was a retrospective observational study. All cases of Methanol poisoning from January 1988 to December 2014 were reviewed.

Results Total number of methanol poisoning cases reported in the duration of (Jan.1988–Dec.2013) were 35 (1.4%). All were male with mean age of 36.2 ± 8.6 years. Present in ER with the mean GCS of 10.4 ± 4.4. Blurring of vision present in 48% and 28% with complete blindness. Mean arterial pH on arrival is 6.8 ±0.5. Eighty eight percent received ethanol and 32% received bicarbonate for immediate treatment. Dialysis requried in 20%. Total mean length of stay in hospital was 76122 hours.Thirty six percent were expired while 64% discharge with complication (Blindness and acute kidney injury). In a multivariate Cox regression analysis, it was computed that the GCS score (odds ratio [OR] 0.71, 95% confidence interval [CI]: 0.582−0.876) (P = 0.032), and serum creatinine level (OR 3.79, 95% CI: 1.32−17.440) (P = 0.026) were significant risk factors associated with mortality and complications.

Conclusions From the study we concluded that due to lack of awareness the burden of this poisoning is increasing causing increase in mortality and morbidity. Low GCS and sercum creatinie are associated with worst outcome. Although this data does not reflect the actual incidence of methanol poisoning in our country as majority of them goes to government hospital and most of them die before seeking any medical treatment.

Sports and Exercise Safety

Post Wed 3.6

971 SPORTS INJURIES AMONG HIGH SCHOOL ATHLETES IN WEST CENTRAL FLORIDA FOR ACADEMIC YEAR 2014–2015

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Background Sports injuries in children and adolescents continues to be a growing public health concern. The purpose of this research is to report the 2014–2015 results of the University of South Florida (USF) Sports Medicine and Athletic Related Trauma (USF-SMART) Institute high school athletes' sports injury data.

Methods The SMART program hires certified athletic trainers (ATCS) to collect data on high school athletes' sports injuries in schools in west-central Florida. Utilising the Reporting Information Online (RIO) Surveillance System, data were collected by ATCS from 18 large public and private high schools and SAS Version 9.4 was used for the data analysis. Data analysis included descriptive statistics, calculations of injury rates per 1000 athletic exposures, and determination of relative risks.

Results The leading rate of injury per 1000 athlete-exposures for practices was for football at 2.91, followed by men's cheerleading at 2.23, and women's wrestling at 2.16. For competitions, the injury rate per 1000 athlete-exposures was greatest for football at

13.1, followed by men's lacrosse at 6.80 and men's wrestling at 6.55. Seven-hundred-twenty-six injuries were reported by the ATCs of which the majority of injuries were to males (77.5%) with injuries largely to the head/face, ankles, and knees. The leading type of injury across sports was ligament sprain (27.7%), followed by concussion (23.2%), and muscle strain (11.6%). For all sports, boys had a significantly greater injury rate compared to girls and this was true across competitions and practices (Relative Risk (RR) = 2.79, Confidence Interval (CI): = 2.32–3.34; RR = 2.98, CI: = 2.28–3.88; RR = 2.88, CI: = 2.22–3.74, respectively).

Conclusions The results of this research confirm the important role of various sports injuries among high school athletes with an emerging role for high school lacrosse. The results of these findings will be used to develop targeted interventions to reduce sports injuries in these athletes.

972 THE EFFECTIVENESS OF INJURY PREVENTION PROGRAM ON REDUCING THE INCIDENCE OF LOWER LIMB INJURIES IN ADOLESCENT MALE SOCCER PLAYERS

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Background The highest incidence of injury is seen in adolescent playing pivoting sports such as soccer, basketball, and handball.

Objective: To examine the effectiveness of a neuromuscular prevention program in reducing knee and ankle injuries in adolescent male soccer players.

Methods Fifty Malaysian boys [25 experimental (EXP); or a 25 control (CON)] adolescent male soccer players (age 13.3 ± 0.4 yr; BMI 20.9 ± 1.5 kg/m^2; stature: 160 ± 0.1 cm) from two sport schools, with 4.4 ± 0.5 years playing experience participated. The EXP group followed neuromuscular prevention program 5 days per week, for 12 weeks. The CON group was instructed to continue training and warm-up as usual. A neuromuscular exercise programme designed exclusively for adolescent soccer players was including jumping, eccentric strength, agility, balance, dynamic stretching and speed. Over 1 year all injuries were documented monthly by physiotherapist. Complete monthly injury reports were available for 50 players.

Results Eight lower limb injuries [Knee 3, (0.12 ± 0.32); Ankle 5, (0.19 ± 0.38)] occurred in the EXP group, and 11 lower limb injuries [Knee 1, (0.03 ± 0.12); Ankle 10, (0.40 ± 0.50)] occurred in the CON group. The incidence of injuries per 1000 player- hours of training and playing soccer was 1.7 in the EXP group, and in the CON group 2.4 injuries per 1000 player-hours, which equates to 29% fewer injuries in the EXP group. Significance of difference between the EXP and CON groups was $p < 0.05$.

Conclusions Effective implementation of neuromuscular injury prevention program can reduce lower extremity injury incidence in adolescent male soccer players. Adolescent players need better education regarding injury prevention strategies and should include such interventions as part of their regular training.

973 KNEE CONTROL AND JUMP-LANDING TECHNIQUE IN YOUNG BASKETBALL AND FLOORBALL PLAYERS

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Background Poor knee alignment is associated with increased loading of the joints, ligaments and tendons, and may increase the risk of injury. The study purpose was to compare differences in knee kinematics between basketball and floorball players during a vertical drop jump (VDJ) task. We wanted to investigate whether basketball players, whose sport includes frequent jump-landings, exhibited better knee control compared with floorball players, whose sport involves less jumping.

Methods Players (aged 12–21 years) were recruited from six basketball and floorball clubs of the Tampere City district, Finland. Complete data was obtained from 173 basketball and 141 floorball players. Peak knee valgus and flexion angles during the VDJ were analysed by 3 D motion analysis.

Results Larger knee valgus angles were observed among basketball players (−3.2º, 95% CI: −4.5 to −2.0) compared with floorball players (−0.9º, 95% CI: −2.3 to 0.6) (P = 0.022). Basketball players landed with a decreased peak knee flexion angle (83.1º, 95% CI: 81.4 to 84.8) compared with floorball players (86.5º, 95% CI: 84.6 to 88.4) (P = 0.016). There were no significant differences in height, weight or BMI between basketball and floorball players. The female athletes exhibited significantly ($P < 0.001$) larger peak knee valgus angles (−7.5º, 95% CI: −8.7 to −6.2) than the male athletes (3.4º, 95% CI: 2.1 to 4.6).

Conclusions This study revealed that proper knee control during jump-landing does not seem to develop in young athletes simply by playing the sport, despite the fact that jump-landings occur frequently in practice and games. Poor knee control was especially common among young female athletes. An important clinical implication of these findings is that young team sport athletes need to be taught a safer technique for landing and also need specific neuromuscular training in order to avoid potentially harmful movement patterns. (Int J Sports Med 2015, accepted for publication)

974 MX SAFETY MOVEMENT AND SAFETY PROJECT

Teija Piirto. *Mx Safety Project Founder and Leader, Finland*

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Background MX Safety campaign started 2014. Campaign is lead by Teija Piirto who's mission is very personal due to a loss of her own brother. MX Safety's aim is to create encouraging safety debate and advance safety at off road tracks with track users. Target is zero fatal accidents in basic training environment and national and club level races, worldwide. All the work is done through voluntary work. Project has a wide range of knowledge