

T.C. İSTANBUL ÜNİVERSİTESİ ÇOCUK SAĞLIĞI ENSTİTÜSÜ





Determination of risks of indoor and outdoor injuries among 0-5 year- age- group of children during well-child care

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ESSOP 2010
Kuşadası, Aydın
Türkiye



T.C
İSTANBUL ÜNİVERSİTESİ
İSTANBUL TIP FAKÜLTESİ
ÇOCUK SAĞLIĞI VE HASTALIKLARI ANABİLİM DALI

Çocuk Sağlığı Enstitüsü



Blue Lagoon, Grandavik 2008



ESSOP 2008, Iceland

Housed by:

NAPCAN
PREVENTING CHILD ABUSE



APCCAN 2009

8th ISPCAN Asia Pacific Regional Conference on Child Abuse & Neglect
Incorporating the 12th Australasian Conference on Child Abuse & Neglect
15-18 NOVEMBER PERTH, AUSTRALIA
Child Abuse & Neglect: Looking Through the Lens of Prevention



APCCAN 2009

APCCAN 2009

Launch of The Rights of the Child

The Rights of the Child is a commemorative book, produced by the Australian Children's Commissioners and Guardians to celebrate the 20th anniversary of the Convention on the Rights of the Child, and the 50th anniversary of the Declaration on the Rights of the Child. It promotes the importance of the Convention from the children's perspective.

Riverside Theatre

Child Abuse & Neglect: Learning Through the Lens of Prevention



APCCAN 2009, Perth, West AU









APPCAN 2009, Perth



APPCAN 2009, Perth





Kings Park, Perth



ESSOP 2006, Cardiff



ESSOP 2007, Trieste



ESSOP 2007, Trieste

European Society for Paediatric Obstetrics and Child Health
Systems and Child Health: Insights from cross-country comparisons
13-14 September 2007



Hygiene and health of students in Geneva schools: hand washing, toilets and access to water

Olivier Dapertin, Etienne Jaquet, Marine Girard and Paul Bouvier

Service de santé de la jeunesse, office de la jeunesse, département de l'instruction publique, Etat de Genève
and Institut de médecine sociale préventive, Université de Genève

BACKGROUND

Handwashing, toilets and access to water are essential for public health. A large report in the Geneva public schools is ongoing. Monitoring schools sanitary facilities is within the mission of the health department.

OBJECTIVES

To assess perception of students and school professionals regarding access to adequate school and hand washing facilities in Geneva public schools.

To document the sanitary and quality of handwashing facilities in schools.

METHOD

During 10 classes, 1000 students and 100 school professionals were surveyed. 100 schools were inspected.

Questionnaires were sent to all schools. The results were analyzed using statistical software.

CONCLUSIONS

Access to toilet facilities is poor in many schools. Handwashing facilities are often inadequate. The results are particularly poor in secondary schools. The results are poor in schools with inadequate handwashing facilities and lacking resources for maintenance.

We identified three priority acts for action: providing adequate handwashing facilities, ensuring security and maintenance of toilets.

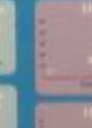


RESULTS

Students said:



OBSERVATIONS



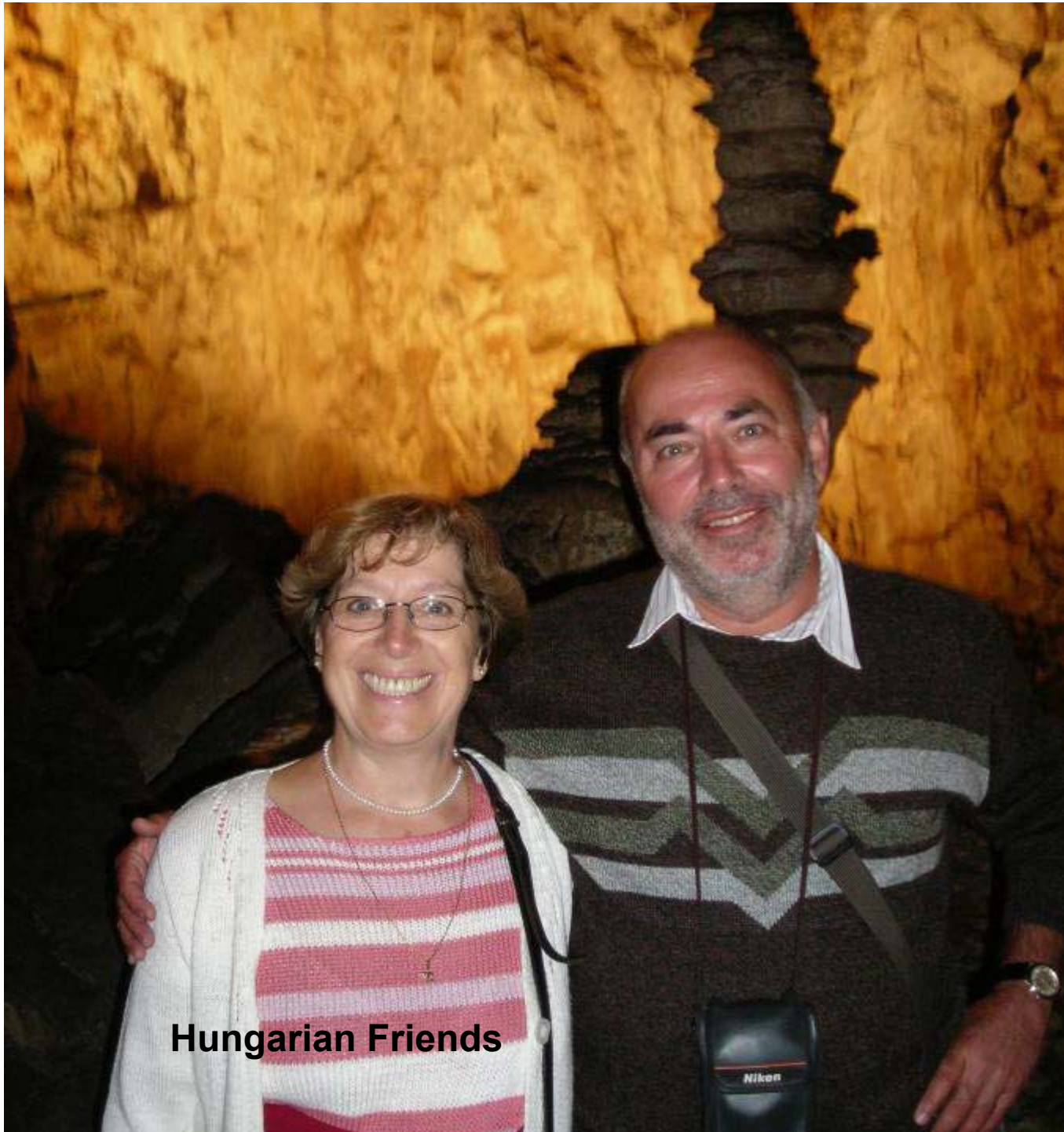
Professionals said:

Issues with hygiene in toilets, access to water or security in toilets. 45% of schools have no handwashing facilities in the premises.

ESSOP 2007, Trieste



ESSOP 2007, Trieste



Hungarian Friends



ESSOP 2007 Gala Dinner

Background

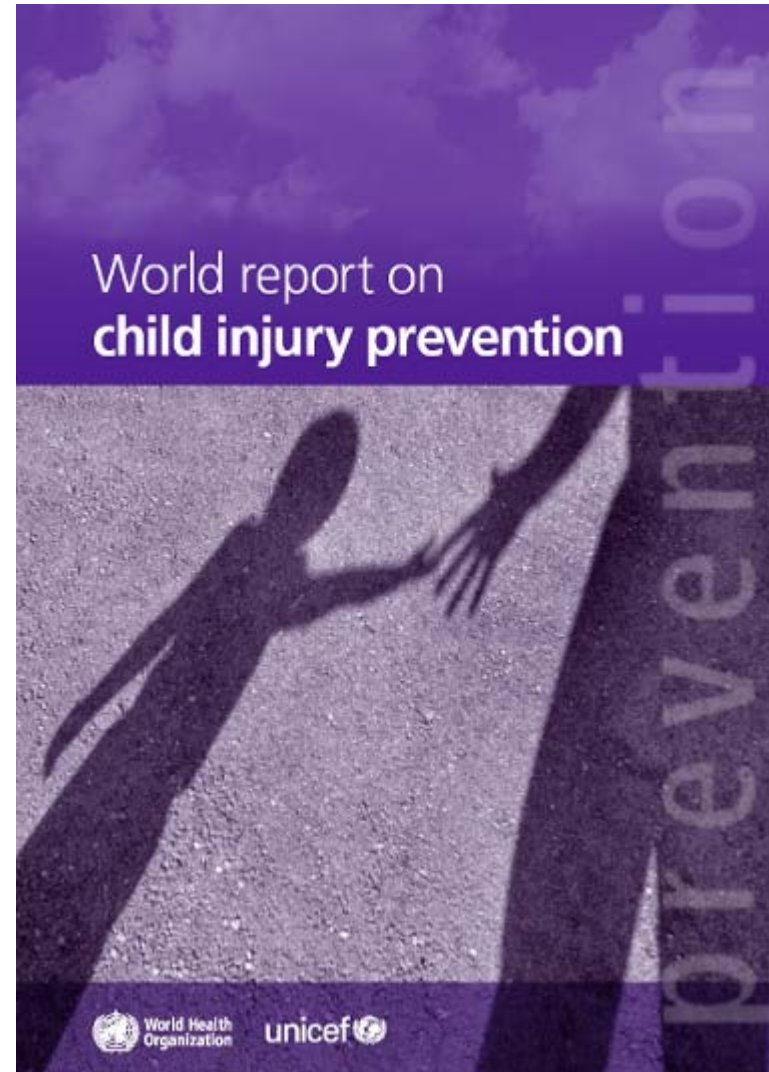
- Accidents/ injuries are important causes of mortality and morbidity in children both in the developed and developing countries.

World report on child injury prevention

- Every day, more than 2000 children and teenagers die as a result of an unintentional or accidental injury which could have been prevented.
- The report presents the current knowledge about the five most important causes of unintentional injury – road traffic injuries, drowning, burns, falls and poisoning – and makes seven recommendations for action.
- If established prevention measures were adopted everywhere at least 1000 children's lives could be saved every day.

Goal of the report

- Raise awareness
- Present what is known about effectiveness of interventions
- Make recommendations



Disease Burden

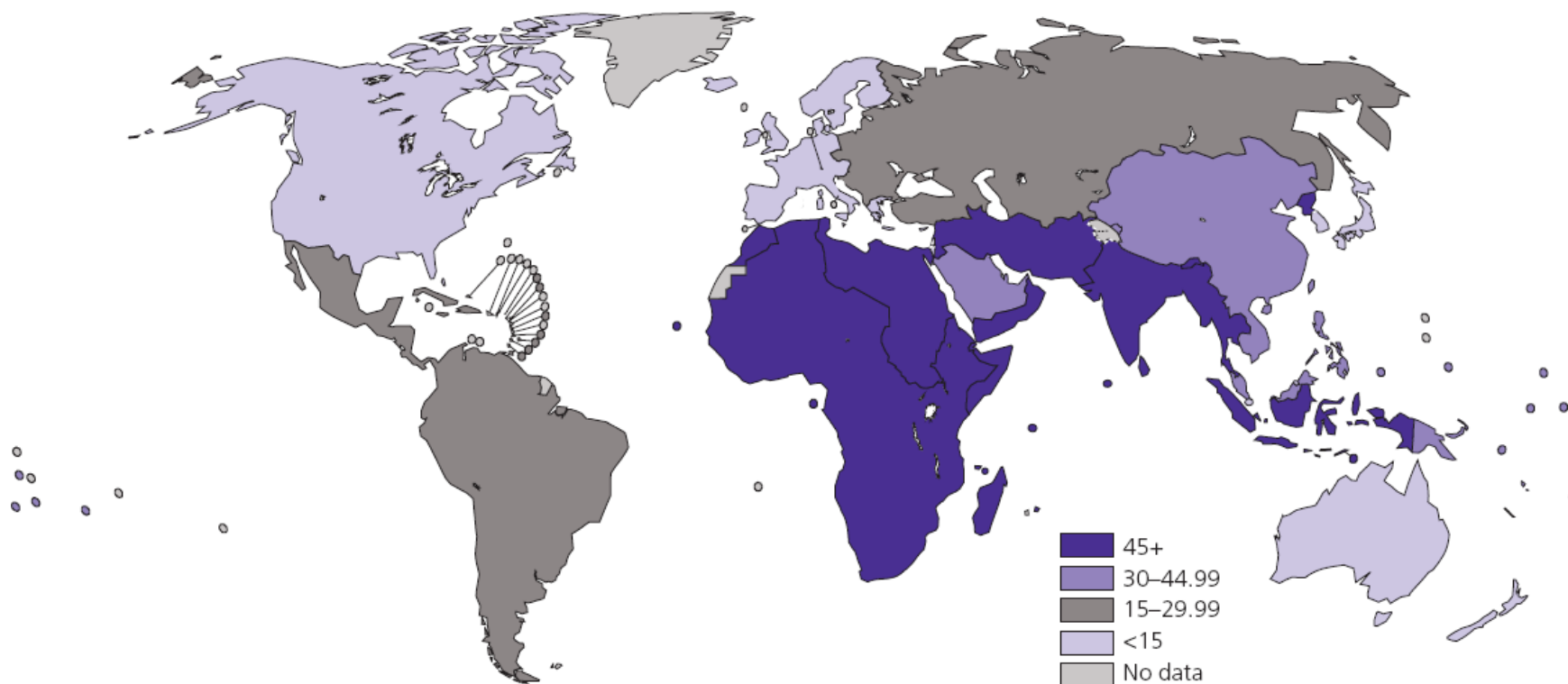
- Unintentional injuries are the leading cause of childhood death after the age of 9 years and 95% of these injuries occur in developing countries.
- Although many high-income countries have reduced their child injury deaths by up to 50% over the past 30 years, the issue is still a problem, with unintentional injuries accounting for 40% of all child deaths in such countries.

WHO / UNICEF report

- This joint WHO / UNICEF report is a plea to keep kids safe by promoting evidence-based injury prevention interventions and sustained investment by all sectors.

Child injuries are strongly related to social determinants

Rate of unintentional injuries per 100 000 children^a, by WHO region and country income level, World, 2004



Africa	Americas		South-East Asia	Europe		Eastern Mediterranean		Western Pacific	
LMIC	HIC	LMIC	LMIC	HIC	LMIC	HIC	LMIC	HIC	LMIC
53.1	14.4	21.8	49.0	7.9	25.4	41.6	45.7	7.8	33.8

^a These data refer to those under the age of 20 years.
HIC = High-income countries; LMIC = low-income and middle-income countries.

Source: WHO (2008), Global Burden of Disease: 2004 update.

Health Indicator

“Frequency of accidents is one of the indicator of population health”

Barbara Barlow, MD

Objective

- The aim of this study was to determine the risks of indoor and outdoor injuries among 0-5 year-age-group of children.

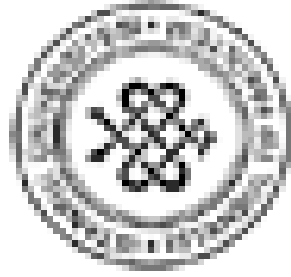
Method

- The parents of children who follow up regularly at The Child Health Surveillance Clinic between September 2009 and February 2010 participated in the study.

Method

- The parents were asked to fill a questionnaire to determine the risks of injuries.
- Information about child and family characteristics was also obtained.
- They were consequently given safety counseling by a physician.
- The computer based statistical analysis of data was performed.

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ÇOCUK GÜVENLİĞİ

*Yararlanma alanları
ve
Zahırlanma alanları Konusunda
Güvenlik Komitesi Listesi*

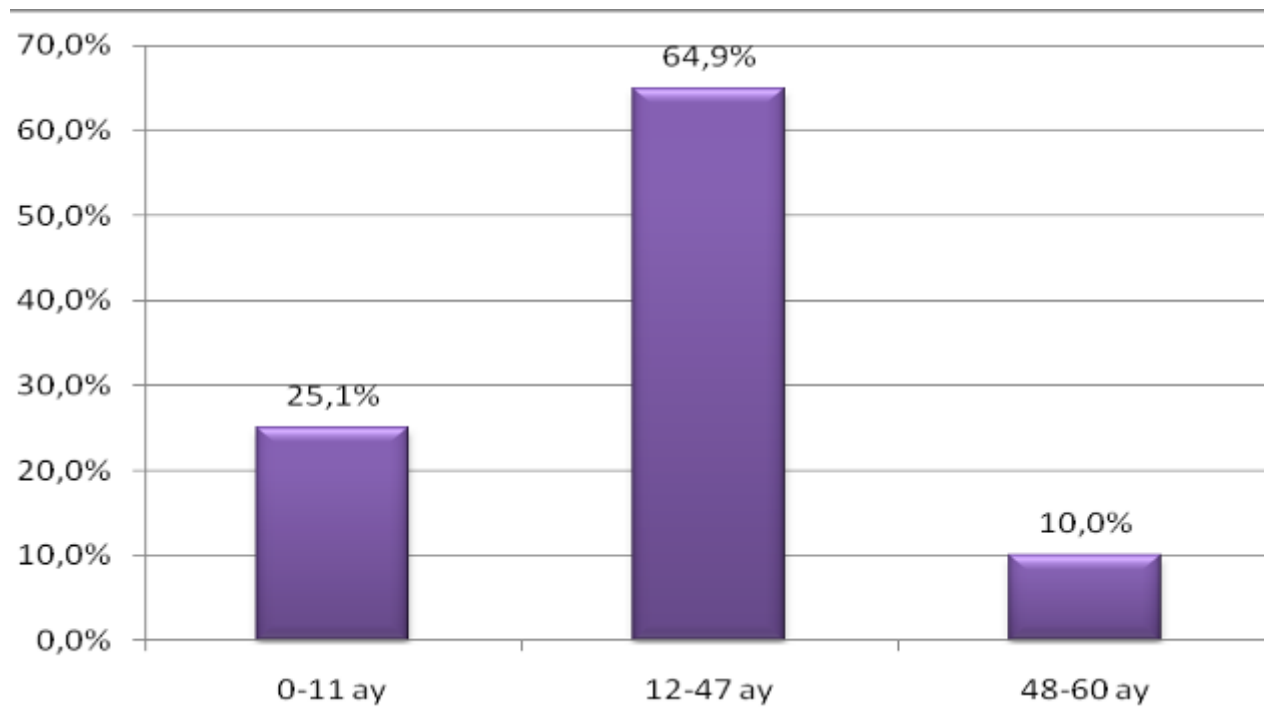
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<http://www.cocuksagligidernegi.org/yayinlar.html>



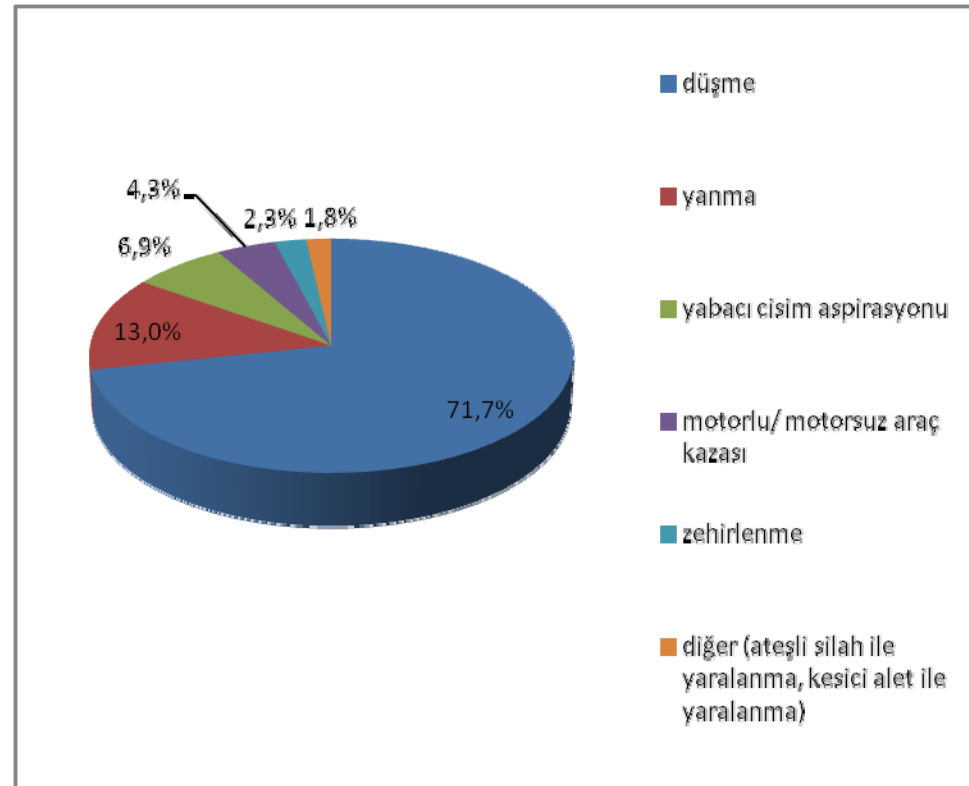
Age Groups

Mean Age: $20,09 \pm 14,85$ mos median: 15 mo



Main Results

- The rate of previous accidents/injuries involving children included in the study was 15.3%.



Frequency of injuries for a given child

- Cases: Two and four yrs m, fall and burn
- Five yrs m, fall and bicycle injury
- Five yr m burn, ingestion, fall



Main Results

- 59.8% of these children were boys;
- 95.3% were less than four years old.
- The most common cause was falls (77.1%)
- Falls are followed by burns and foreign body aspiration.



Main Results

- Less than 1% of children were found having no risk for any given type of accident.
- The parents' knowledge and attitude towards accidents were inadequate.

Main Results

- The risk awareness was highest for intoxications, least for burns.
- 50.5% of parents were previously informed about injury prevention.
- 17.7% of parents believe that injuries can not be prevented.

RISKS FOR FALLS

	Safe	Not safe
Zemin katın üzerindeki pencereler çocukların düşmeyeceği şekilde güvenli mi?	%89,7	%10,3
Zeminler, kilim ve yolluklar kaygan mı?	%90,3	%9,7
Çocuklar bebek sandalyesi, masa üzeri ya da diğer yüksek yerlerde yalnız bırakılıyor mu?	%93,9	%6,1
Gözlenmeyen ya da güvensiz alanlara açılan kapılar kapalı ve kilitli mi?	%84,1	%5,9
Bebek yüksek bir yerde iken daima bir eliniz bebeğinizde mi?	%95,5	%4,5
Merdiven, tırabzan üstleri, eşikler ve balkon parmaklıkları sağlam mı?	%96,1	%3,9
Giriş ve hol düşmeleri önlemeye yeterli olacak şekilde aydınlanıyor mu?	%98,2	%1,8

- Risk of fall- more than 70 per cent of children.

RISKS FOR BURNS

	Safe	Not safe
Yangında kaçış planı yapıldı ve prova edildi mi?	%8,8	%91,2
Her çocuk eğer elbiseler tutuşursa, alevleri söndürmek için “dur, yere uzan ve yuvarlan” uygulamasını nasıl yapacağını biliyor mu?	%10,2	%89,8
Evde yangın/ duman alarmı var mı?	%10,9	%89,1
Binanın yangın ve diğer acil durumlarda kullanılabilir iki çıkışı var mı?	%23,9	%76,1
Sağlam bir yangın söndürücü var mı?	%24,8	%75,2
Bütün elektrik çıkışlarına plastik priz kapakları yerleştirildi mi?	%55,5	%44,8
Birden çekilince masanın üzerindeki sıcak yiyecek ve içecekler dökülebileceği için masa örtüsü kullanmıyor musunuz?	%68,4	%31,6
Çevrede sigara içiliyor mu? Yanık sigara, kibrit ve çakmaklar çocukların çevresinde bulunuyor mu?	%70	%30
Kullanıldığı zaman elektrik kabloları çocukların ulaşamayacağı yerde mi?	%76,1	%23,9
Su ısıtıcı güvenli bir sıcaklığa ayarlı mı?	%79,9	%20,1
Sıcak sıvı ya da yiyecekleri taşıırken yanınızda çocuk oluyor mu?	%80,4	%19,6

RISKS FOR BURNS

	Safe	Not safe
Elektrik için uzatma ve uygulama kabloları aşınmamış ya da fazla yüklenmemiş durumda mı?	%82,5	%17,5
Bütün sobalar çocukların dokunamayacağı bir durumda mı?	%89,7	%10,3
Bütün soba ve ısıtıcılar kağıt ve mobilyalardan en az 90 cm uzağa konmuş mu?	%93,9	%6,1
Sıcak sıvıları ve yiyecekleri masanın kenarından uzağa mı koyuyorsunuz?	%95,9	%4,1
Elektrikli aletler (radyo, saç kurutucusu, ısıtıcı vb)banyonun dışında ya da fişleri çekilmiş, sudan uzakta ve çocukların ulaşamayacağı yerde mi?	%96,3	%3,7
Çocuklarınıza 'sıcak' kelimesinin anlamını öğretiyor musunuz?	%96,4	%3,6
Mümkün olduğu kadar ocağın arka bölümlerinde yemek pişiriyor, kapların kulplarını ocağın arka tarafına döndürüyor musunuz?	%96,8	%3,2
Yemek pişirirken çocukları güvenli bir yerde mi tutuyorsunuz?	%97,9	%2,1
Masa sandalyelerini ve iskemleleri ocaktan uzağa koyuyor musunuz?	%98,9	%1,1
Isıtılmış yiyeceklerle bebeği beslemeden önce sıcaklığını kontrol ediyor musunuz?	%99,3	%0,7





RISKS FOR FOREIGN BODY ASPIRATION / CHOKING

	Safe	Not safe
Çocuk güvenli bir biçimde yüzmeye hazır mı?	%23,4	%76,6
Küvetin içinde kaymayı önleyen bir yaygı var mı?	%67,5	%32,5
Oyuncak sandıklarının kapakları hafif, kapaksız ya da güvenli kapanan menteşeleri var mı?	%80,4	%19,6
Çevrenizde yüzme havuzu ve 6 yaşın altında çocuklar var mı?	%84,5	%15,5
Her zaman yüzme sırasında bir yetişkin tarafından bakılıyor mu?	%85,6	%14,4
Bozuk paralar, takılar ve tuşları kolayca yutulabilecek hesap makineleri çocukların ulaşamayacağı yerde mi?	%89,0	%11
Oyuncaklar, bir çocuğun ağzına sığmayacak kadar büyük ve tıkanmaya sebep olabilecek küçük, çıkarılabilen parçaları yok	%92,3	%7,7
Çocuğun tıkanmasına neden olabilecek yiyecek ve küçük parçalar (şişirilmemiş balon dahil) çocukların ulaşamayacağı yerde mi?	%93,6	%6,4
Bebeler ve küçük çocuklar küvette oldukları zaman daima bir yetişkin tarafından bakılıyor mu?	%99,6	%0,4

6 percent had no risk

RISKS FOR POISONING

	Safe	Not safe
Tehlikeli olabilecek maddelerin konduđu dolaplar çocukların ulaşabileceđi yerde ise üzerinde kilit var mı?	%70	%30
Temizlik ürünleri ve dezenfektanlar çocukların ulaşamayacağı bir dolapta kilitli mi?	%86,4	%13,6
Çocuklar tehlikeli ürünlerin genellikle depolandığı yer olan bodrum ya da garaja girebiliyor mu?	%86,7	%13,3
Tüm evle ilgili kimyasal ürünleri orijinal kutularında yüksek yerlerde mi tutuyorsunuz?	%91	%9,0
Duvarda ya da mobilyaların üzerinde, kabaaran, dökülen ya da soyulan boya var mı?	%92,9	%7,1
Zararlı olabilecek bitkiler çocukların ulaşamayacağı yerde mi?	%94,2	%5,8
İlaçlar ve vitaminler çocuđun açamayacağı kutularda ve çocukların ulaşamayacağı yerlerde mi saklanıyor?	%95,8	%4,2
Böcek öldürücüler, sadece çocukların erişemeyeceđi ve yiyeceklerle doğrudan temas olmayan yerlere uygulanıyor mu?	%97,1	%2,9
Temizlik ürünlerini yiyeceklerden ayrı bir yerde mi saklıyorsunuz?	%98,8	%1,2

Risks Related to Motorised & Unmotorised Vehicles

	Safe	Not safe
Çocuk güvenli olarak bisiklete binmeye hazır mı?	%30,2	%69,8
1 yaşından büyük çocuğunuz için araba güvenlik koltuğu kullanıyor musunuz?	%34,2	%65,8
Koruyucu bir başlık (kask) giyiyor mu?	%39,4	%60,6
Çocuk boyu ve ağırlığı standart bir emniyet kemeri kullanmaya hazır mı?	%44,5	%55,5
Bebek tipi güvenlik koltuğu kullanıyor musunuz?	%56,3	%43,7
Siz ve sizinle arabada yolculuk eden herkes yolculuk boyunca emniyet kemeri takıyor mu?	%72,9	%27,1
Uygun büyüklükte bir bisiklete yolun sağ yanında mı biniyor?	%77,2	%22,8
Yolculukta bebekler için bebek tipi güvenlik koltuğu kullanıyorsanız, yönü aracın arkasına bakacak şekilde mi?	%78,8	%21,2
Çocuklar araba koltuğunda tam olarak korunuyor mu?	%81,8	%18,2
Çocuğunuz yürüteç kullanıyor mu?	%81,6	%15,8
Bilmediği, ödünç alınmış bir bisiklete biniyor mu?	%92,6	%7,4
Arabada çocuklar arka koltukta mı yolculuk ediyor?	%98,2	%1,8



Other injuries

- Three yrs m with sarp object-broken glass- ambulatuar therapy need
- One male had been injured **in utero** ! Because the mother shut with firearm. After s/c he was hospitalised for 29 days.

RISKS RELATED TO FIREARM INJURIES

	Safe	Not safe
Evde ateşli silah bulunuyor mu?	%89,2	%10,8
Dolu değil ya da kurşunlardan ayrı bir yerde mi?	%69,1	%30,9
Evdeki çocuklar ve ergenler tarafından kolay bulunamaz mı?	%80,9	%19,1
Emniyet kilidi takılı mı?	%94,1	%5,9

Conclusions

- The risk of injuries was high for most of the children which the parents' level of risk awareness was low.
- Parents' education on injury prevention is the most important factor to reduce risks.
- Health professionals should spend time to inquire the risks
- IP counseling during well child visits
- Studies for improving risk awareness must be a priority.

Conclusions

The size, risk factors and preventability of child injuries are not widely appreciated from policymakers.

People who work in emergency care, are also in positions that can influence local or national policies and practices in child injury prevention.

Conclusions by WHO- UNICEF

- Children are susceptible to injuries
- Child injuries can be prevented.
- Few countries have good data on child injury
- More child injury prevention practitioners are needed
- Child injury prevention is the responsibility of many sectors
- Child injury prevention is underfunded
- Awareness needs to be created and maintained

Overall recommendations by WHO

1. Integrate child injury into a **comprehensive approach** to child health and development.
2. Develop and implement a **child injury prevention policy** and a plan of action.
3. Implement **specific actions** to prevent and control child injuries.
4. Strengthen **health systems** to address child injuries.
5. Enhance the quality and quantity of **data** for child injury prevention.
6. Define priorities for **research**.
7. Raise awareness of and target **investments** towards child injury prevention.

- REFERENCE

- 1. World Health Organization. Violence and injury

- prevention and disability (VIP). December 2009

- http://www.who.int/violence_injury_prevention/child/injury/world_report/en/ (accessed Oct 2010).

- <http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/violence-and-injuries>

- CDC- Disease of Prevention- Childhood Injury Report

Website

World Health Organization

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World report on child injury prevention

World report on child injury prevention

Every day more than 2000 children and teenagers die from an injury which could have been prevented. This joint WHO / UNICEF report is a plea to keep kids safe by promoting evidence-based injury prevention interventions and sustained investment by all sectors. The report presents the current knowledge about the five most important causes of unintentional injury – road traffic injuries, drowning, burns, falls and poisoning – and makes seven recommendations for action.

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URL:

http://www.who.int/violence_injury_prevention/child/en/

Conclusion

- Injuries during childhood, are among the leading preventable health problems and leading causes of mortality and disability. Accidents, injuries can be predicted and prevented when risk factors are recognized.
- Establishing a safe environment for children is most effective approach in injury control.
- Regulations must be established at home and in every environment which children live.
- When required, proper safety equipment should be used to assure safety.
- Continuous education, legislative regulations are effective in injury control.
- Individual counseling for injury control, also is one of the most important factor in achieving prevention. Therefore, counseling must be emphasized and placed in daily practice.

Celik Inanc, Ugur Baysal. Epidemiology in childhood injuries. Turkish Arch Ped 2008

- **This study, was conducted to determine the epidemiological data in childhood injuries.**
- **The data were collected by a questionnaire from mothers of children between 0 and 14 years of age admitted to The Trauma and Emergency Surgery Unit with acute injury, and from mothers of children with the same age and sex as controls, followed at The Outpatient Clinic, Department of Pediatrics.**
- **Sixty one per cent of children were between one and five years; sixty nine boys and thirty one girls were included in both groups. Falls ranked on the first line. Burns was on the second, motor vehicle injuries were on the third rank. Very young parents, low socioeconomic level, large family type, to be the first child, were determined as the main factors facilitating injuries.**

CELİK İMAMOĞLU, Uğur Deyişal. Injury Control in Childhood: Family's Role and Safety Counseling. Turkish Arch Ped 2008

- This study was conducted to determine the knowledge and attitudes of mothers of injured children on potential risks and injury prevention, and to deliver individual safety counseling.
- The data were collected by a questionnaire from children between 0 and 14 years of age admitted to The Trauma and Emergency Surgery Unit with acute injury, and their families(Grup 1), and children with the same age and sex, followed at The Outpatient Clinic, Department of Pediatrics(Grup 2).
- **The age of parents, socioeconomical level, family type, to be the first child, were determined as the main factors leading injury.** Knowledge and prevention awareness of injuries were significantly low among the families of injured children($p < 0,001$). In Grup 2, more families had information on injury prevention($p < 0,001$). Higher number of families consider injuries preventable in Grup 2.
- Education level and prevention awareness are the main factors determining risks of injury. Basic education and counseling at health care centers are the most important factors for injury prevention.

Sahin, Ugur Baysal. RISK ASSESSMENT FOR INJURIES&POISONING BY FRAMINGHAM SAFETY SURVEY IN CHILDREN. Toxicology Letters 2001

- It is important to organize and control the psychosocial and physical environment in order to prevent poisoning in our country. This study's aim is to measure the awareness of poisoning prevention of the families with children below the age of six in order to assess the individual risk and the existing risks in the environment.
- Forty five 0-1, 145 one to five, and 27 six-year-old children from 191 families were selected randomly. Parents were required to answer the Framingham Safety Survey (FSS) questionnaires designed for 0-1, 1-5 and 6-year-old. The risk scores for poisoning were measured and the observational risks in the environment were recorded. We detected moderate to high risk scores for poisonings.
- **Place of residence, socioeconomic level, education and age of parents, mother's working status and the type of family were found as the main factors effecting risk awareness.**



*Injury Prevention
is a right for every
children!*