



Home accidents in Europe: a descriptive analysis from the IDB-FDS databank

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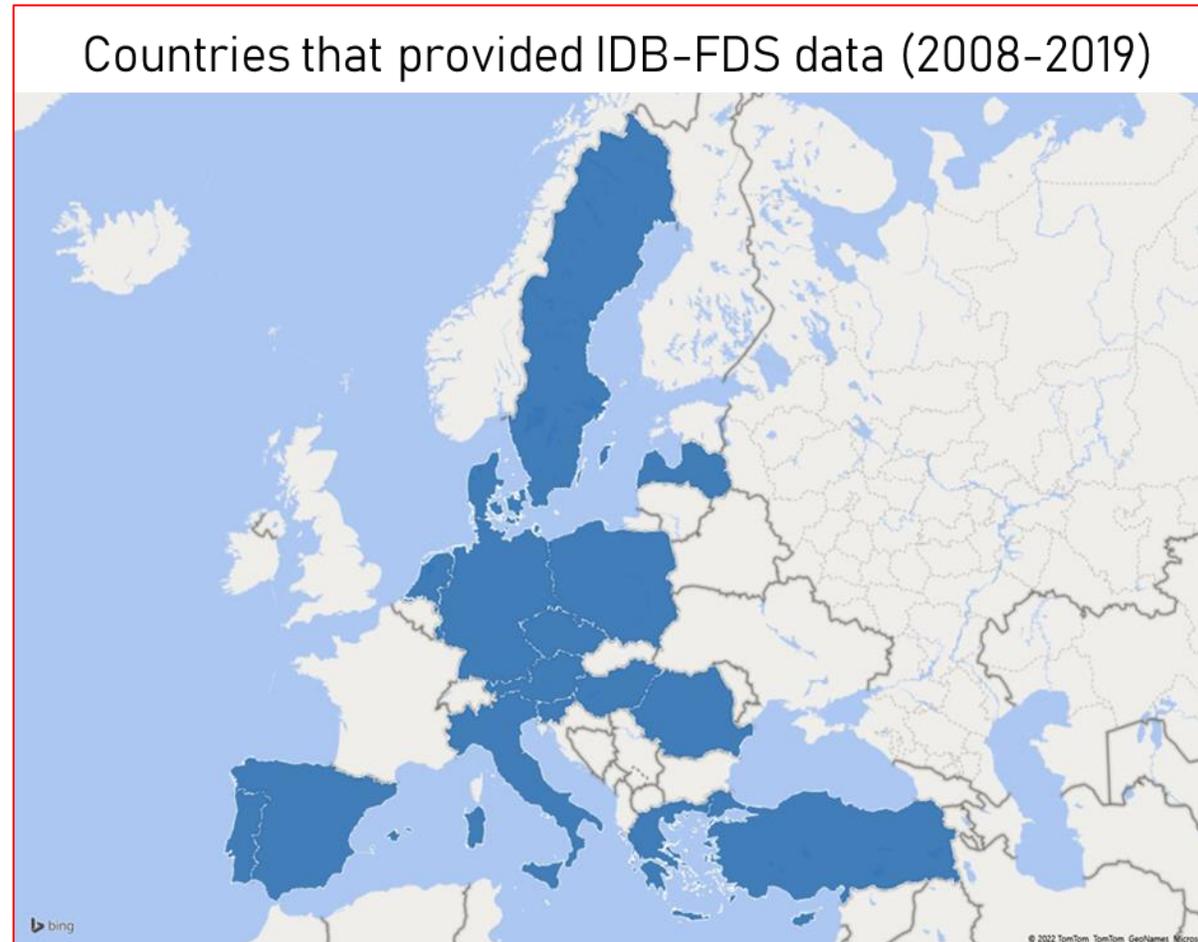
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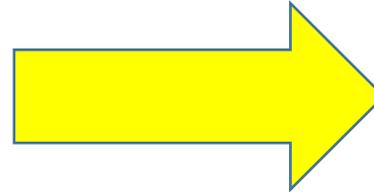
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The Full Data Set (FDS) of the European Injury Database (EU-IDB) is a source of information covering many details on the external causes and circumstances of injury events. The IDB-FDS databank contains more than 3.825.000 ED cases from 19 Countries (years 2008-2019).



FDS CORE DATA SET

- Recording country
- Unique national hospital number (optional)
- Unique national record number
- Age of patient
- Sex of patient
- Country of permanent residence
- Date of injury
- Time of injury
- Date of attendance
- Time of attendance
- Treatment and follow up
- Intent
- Transport injury event
- Place of occurrence
- Mechanism of injury
- Activity when injured
- Underlying object/substance/product:
- Direct object/substance/product
- Intermediate object/substance/product
- Type of injury
- Part of body injured
- Narrative (optional)

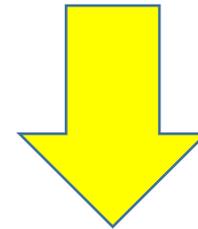


FDS ADDITIONAL DATA SET

- Admission module
- Intentional self-harm module
- Violence module
- Transport module
- Sports module

SELECTION CRITERIA

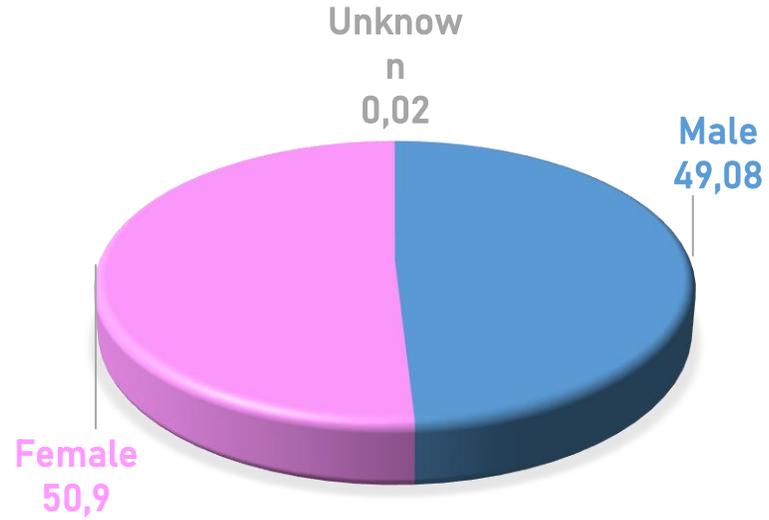
Intent = 1 (unintentional injury) AND
Place = 01.X (home) AND Activity =
02.X - 98.X (no paid work and no
unspecified activity)



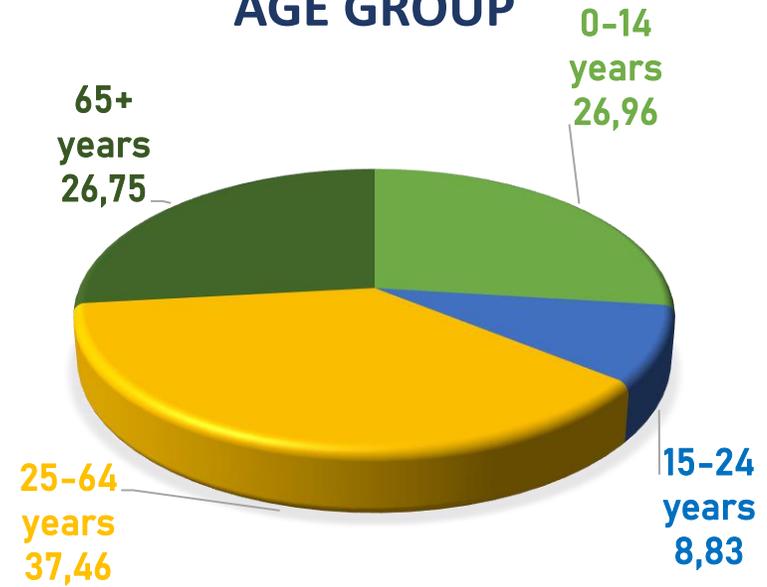
FDS HOME ACCIDENTS

907296 cases

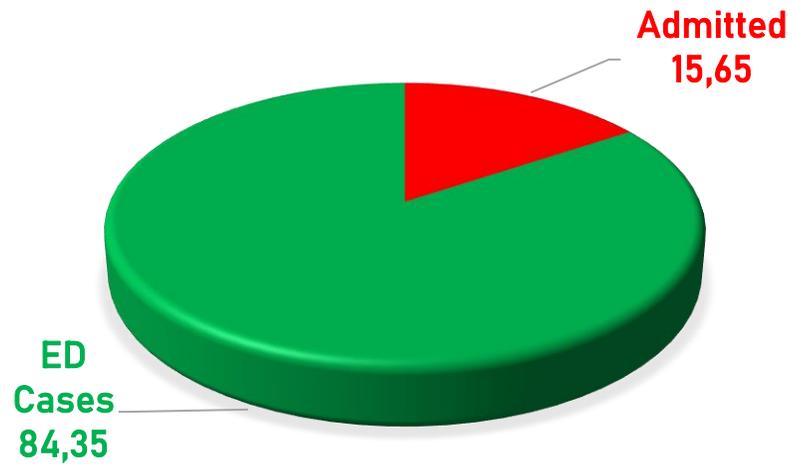
GENDER



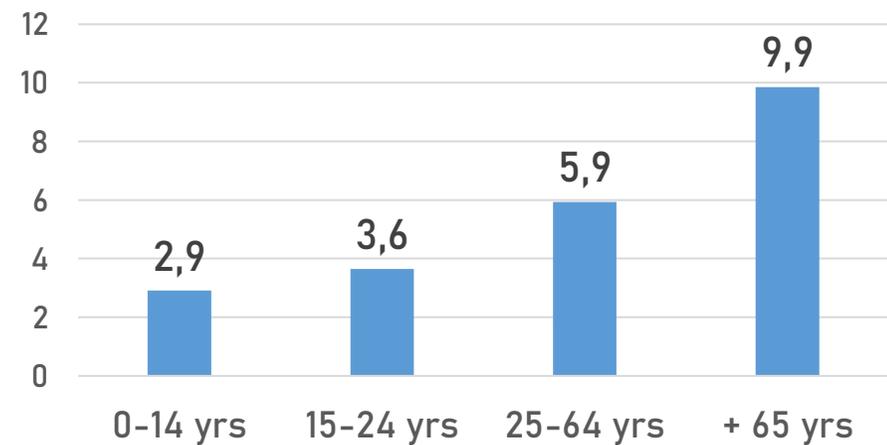
AGE GROUP



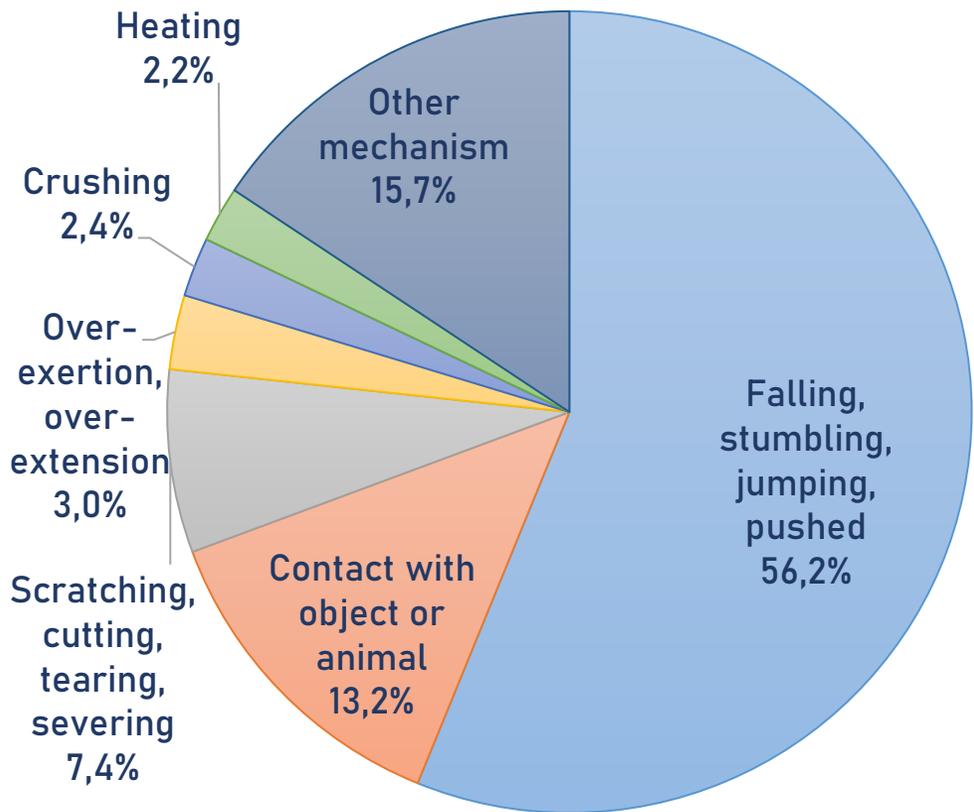
ADMISSION



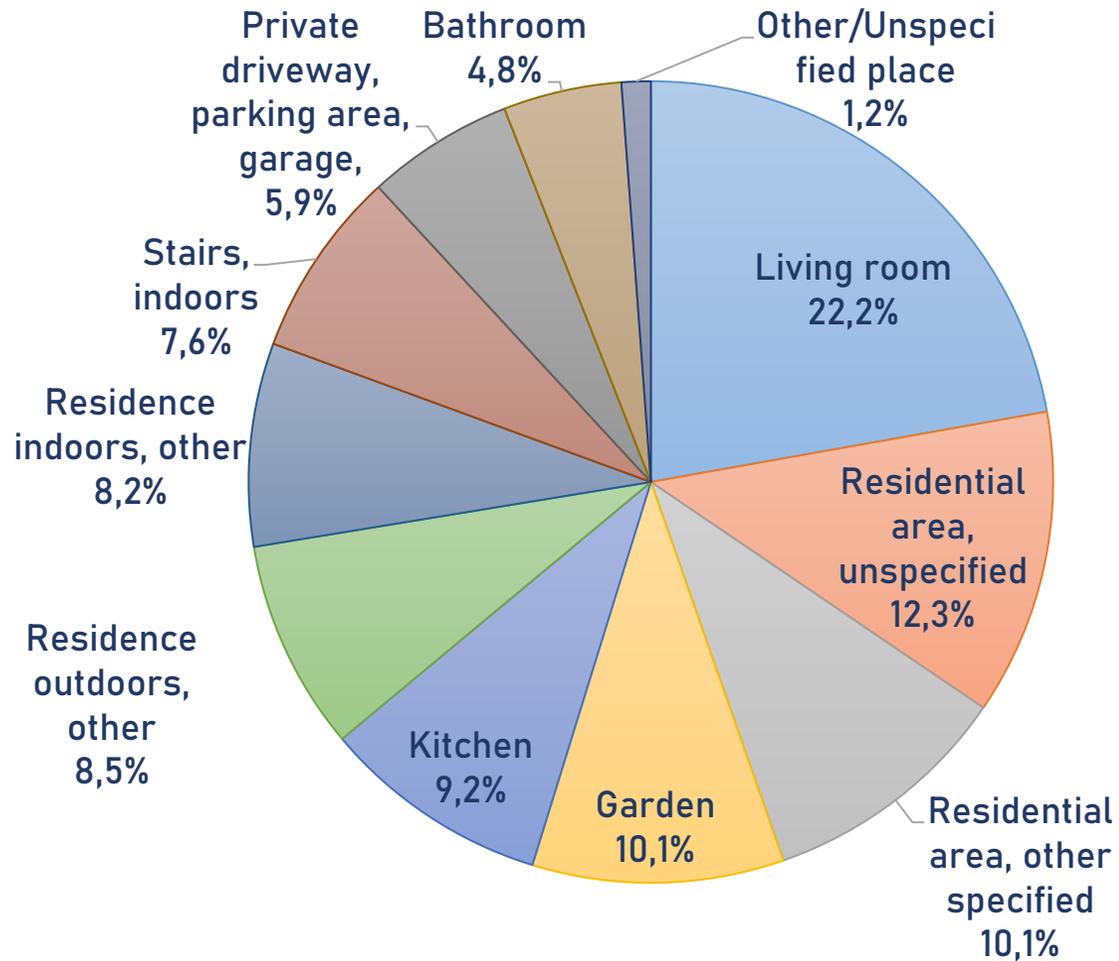
Number of days in hospital (average)



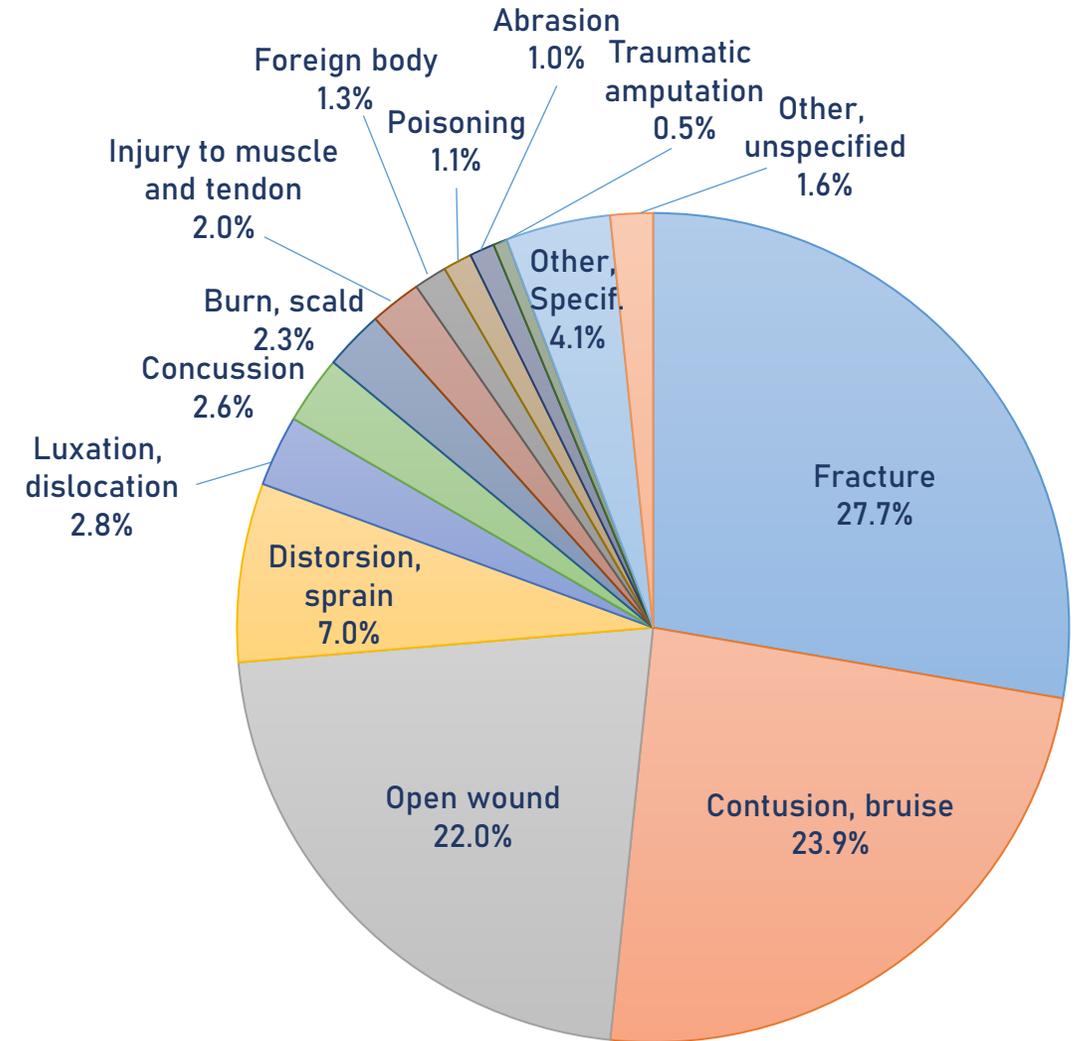
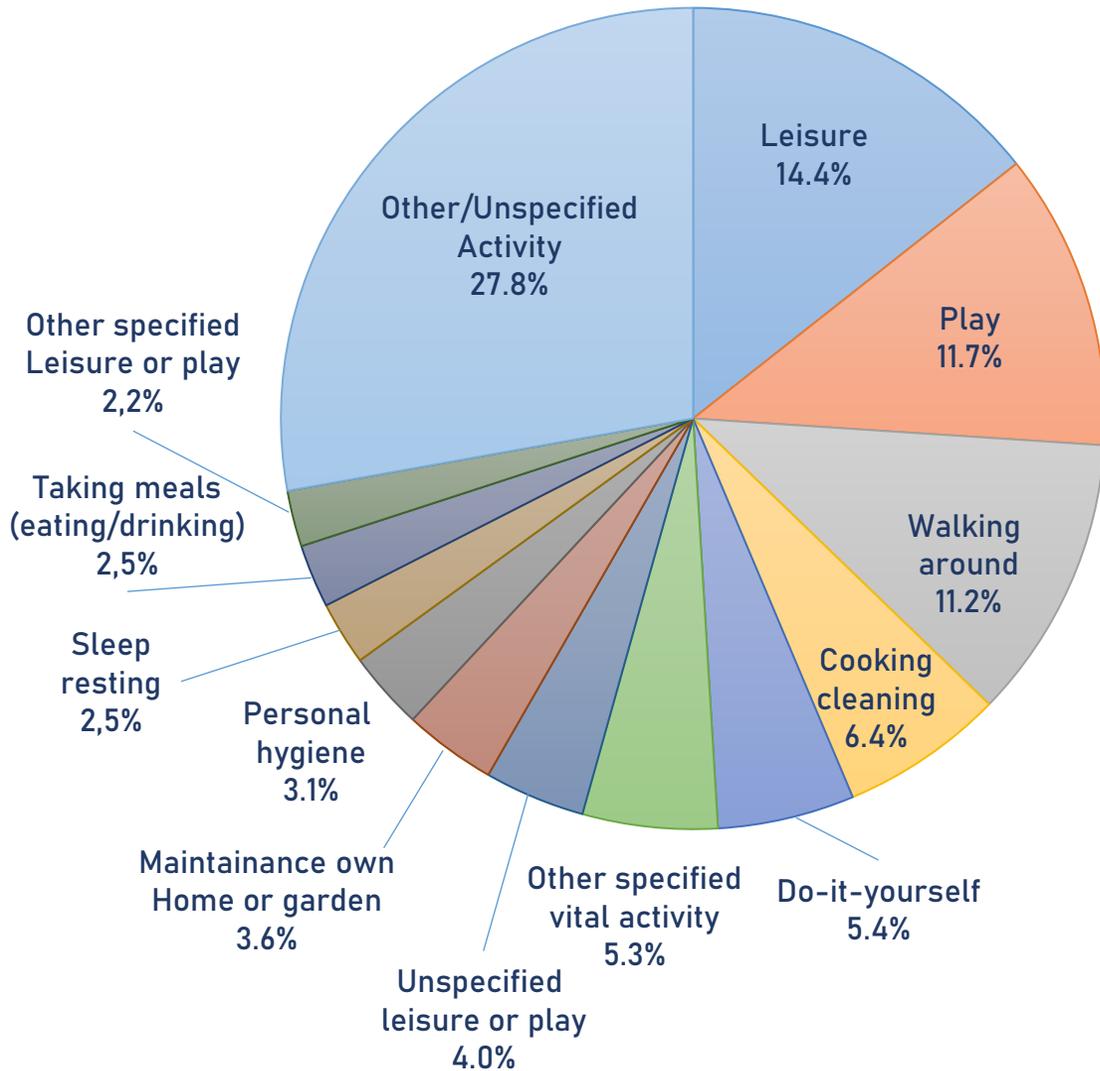
Home Accidents by Mechanism of Injury



Home Accidents by Place of occurrence



Home Accidents by Activity when injured



Home Accidents by Type of injury

Body district	Body part	0-14 yrs	15-24 yrs	25-64 yrs	+65 yrs	All ages
Head	Eye area	1.8%	2.8%	3.3%	1.1%	2.3%
	Face, other and unknown	11.0%	3.8%	3.0%	2.7%	5.1%
	Brain	4.7%	2.1%	1.8%	3.3%	3.0%
	Skull	8.3%	2.7%	2.8%	4.8%	4.8%
	Other specified part of the head	7.5%	2.5%	2.3%	3.3%	4.0%
	Unspecified part of the head	5.3%	1.0%	1.1%	2.3%	2.6%
	<i>Total</i>	38.6%	14.9%	14.3%	17.5%	21.8%
Neck, throat	Cervical spine	0.2%	0.3%	0.3%	0.5%	0.3%
	Organs throat	0.4%	0.2%	0.3%	0.2%	0.3%
	Neck, throat, other specified	0.3%	0.4%	0.3%	0.2%	0.3%
	Neck, throat, unspecified	0.3%	0.3%	0.2%	0.2%	0.2%
	<i>Total</i>	1.3%	1.3%	1.1%	1.1%	1.2%
Trunk	Thoracic spine	0.1%	0.2%	0.4%	0.9%	0.5%
	Organs trunk	0.9%	0.3%	0.2%	0.2%	0.4%
	Thorax	0.8%	1.3%	3.8%	5.8%	3.3%
	Abdomen, lower back, lumbar spine and pelvis	1.6%	2.3%	3.2%	7.4%	3.8%
	Trunk, other specified	0.1%	0.0%	0.0%	0.1%	0.1%
	Trunk, unspecified	0.1%	0.1%	0.1%	0.1%	0.1%
	<i>Total</i>	3.6%	4.2%	7.8%	14.5%	8.1%
Upper extremities	Collar bone	0.8%	0.4%	0.4%	0.4%	0.5%
	Shoulder	1.4%	2.6%	3.5%	4.9%	3.2%
	Upper arm, humerus	1.8%	0.6%	1.4%	3.5%	2.0%
	Elbow	4.6%	2.0%	1.6%	1.2%	2.3%
	Forearm, lower arm	5.9%	3.4%	3.7%	4.7%	4.5%
	Wrist	4.7%	5.7%	5.5%	4.9%	5.1%
	Hand, fingers	11.5%	28.3%	21.9%	7.0%	15.7%
	Upper extremities, other specified	0.0%	0.0%	0.0%	0.0%	0.0%
	Upper extremities, unspecified	2.6%	2.0%	3.1%	2.6%	2.7%
	<i>Total</i>	33.5%	45.1%	41.2%	29.1%	36.2%
Lower extremities	Hip	0.3%	0.5%	1.1%	8.5%	2.8%
	Upperleg, thigh	1.0%	0.9%	1.6%	9.5%	3.5%
	Knee	2.1%	5.4%	5.5%	3.7%	4.1%
	Lower leg	2.0%	2.0%	3.5%	3.1%	2.8%
	Ankle	3.9%	8.1%	7.0%	3.2%	5.2%
	Foot and toes	7.2%	11.6%	10.6%	3.1%	7.7%
	Lower extremities, other specified	0.1%	0.1%	0.1%	0.0%	0.1%
	Lower extremities, unspecified	1.5%	1.2%	2.2%	2.7%	2.0%
	<i>Total</i>	18.0%	29.9%	31.5%	33.7%	28.3%
Other	Multiple body parts affected	0.9%	0.8%	0.9%	1.0%	0.9%
	Whole body affected	1.1%	1.8%	1.0%	0.4%	0.9%
	Organs, level not specified	0.2%	0.2%	0.1%	0.1%	0.1%
	Body part, other specified	0.8%	0.2%	0.3%	0.6%	0.5%
	Body part, unspecified	1.9%	1.6%	1.8%	2.0%	1.9%
	<i>Total</i>	5.0%	4.6%	4.1%	4.1%	4.4%

Top five Body part injured and Type of Injury by Age Groups

Type of injury	0-14 yrs	15-24 yrs	25-64 yrs	+65 yrs	All ages
Contusion, bruise	28.0%	24.5%	21.2%	23.1%	23.9%
Abrasion	1.1%	1.3%	1.1%	0.5%	1.0%
Open wound	23.2%	27.8%	25.6%	14.0%	22.0%
Fracture	19.7%	15.5%	24.3%	44.9%	27.8%
Luxation, dislocation	2.9%	2.9%	2.8%	2.6%	2.8%
Distorsion, sprain	5.8%	11.8%	9.2%	3.5%	7.0%
Crushing injury	0.4%	0.5%	0.5%	0.1%	0.4%
Traumatic amputation	0.6%	0.5%	0.7%	0.4%	0.5%
Concussion	4.6%	2.1%	1.5%	2.5%	2.6%
Other specified brain injury	0.5%	0.1%	0.3%	0.7%	0.4%
Consequences of foreign body entering through natural orifice	2.0%	1.2%	1.4%	0.4%	1.3%
Suffocation (asphyxia)	0.1%	0.0%	0.0%	0.0%	0.0%
Burns, scalds	4.0%	3.1%	2.1%	0.6%	2.3%
Corrosion (chemical)	0.2%	0.2%	0.2%	0.1%	0.2%
Electrocution	0.1%	0.2%	0.1%	0.0%	0.1%
Radiation (sunlight, X rays)	0.0%	0.0%	0.0%	0.0%	0.0%
Frostbite	0.0%	0.0%	0.0%	0.0%	0.0%
Injury to nerves and spinal cord	0.0%	0.2%	0.2%	0.1%	0.1%
Injury to blood vessels	0.2%	0.1%	0.2%	0.5%	0.3%
Injury to muscle and tendon	0.4%	2.0%	3.4%	1.6%	2.0%
Injury to internal organs	0.1%	0.1%	0.1%	0.1%	0.1%
Poisoning	1.5%	2.1%	1.1%	0.4%	1.1%
Multiple injuries	0.1%	0.1%	0.1%	0.1%	0.1%
Other specified type of injury	2.8%	2.2%	2.3%	2.1%	2.4%
Unspecified type of injury	1.8%	1.4%	1.6%	1.7%	1.6%

Code	Direct Object/Substance	0-14 yrs	15-24 yrs	25-64 yrs	+65 yrs
05.0120	Other specified bed	1.24%			0.78%
05.0199	Unspecified bed, bedding or bedding accessories	1.00%			0.71%
05.0201	Upholstered chair, sofa, couch, lounge, divan	1.09%			
05.0305	Cabinet, cupboard, side board, chest of drawers, tall boy, dresser	1.03%	1.08%	0.92%	0.68%
05.0310	Dining room/kitchen table, kitchen bench	1.03%			
05.0398	Other specified table, stand, cupboard, shelf or partition	1.24%			
08.0105	Knife nec		5.46%	4.40%	0.71%
08.0201	Drinking glass, cup made from glass or china, etc.		0.91%		
10.0310	Trampoline	2.59%			
11.0210	Other power saw			1.05%	
11.0315	Cutting tool			1.04%	
11.0501	Ladder, movable step			1.37%	0.92%
13.0401	Dog	1.34%	1.56%	1.29%	
13.0701	Person, self	2.67%	3.28%	3.63%	3.48%
13.0798	Other specified person	3.30%	2.16%		
14.0201	Door, door sill	3.90%	3.69%	2.27%	1.38%
14.0301	Floor – carpeted	3.56%	2.62%	3.27%	8.33%
14.0305	Floor – tile, brick, concrete (dry)	4.77%	3.71%	5.94%	11.28%
14.0310	Floor – wood (dry)	2.17%		1.23%	3.17%
14.0398	Other specified floor or relating fitting/feature				1.36%
14.0399	Unspecified floor or related fitting/feature	6.22%	3.10%	3.68%	13.83%
14.9816	Stairs, steps	4.19%	9.72%	9.83%	7.49%
15.0198	Other specified ground surface	1.02%			2.40%
15.0199	Unspecified ground surface		0.90%		
15.9999	Unspecified surface conformation	1.82%	1.16%		1.00%
16.0101	Snow, ice		1.03%	1.67%	1.54%
16.0105	Natural grass	1.84%	1.01%	1.26%	1.33%
16.0110	Wood – timber, board, splinter nec		1.38%	2.18%	0.86%
16.0205	Processed surface, outdoors	3.13%	2.25%	2.08%	2.47%
16.0218	Metal – sheet, part, piece etc.		1.23%	1.36%	
16.0238	Glass – sheet, piece, shard, etc.		3.29%	1.64%	
98.9898	Other specified object/substance		1.18%	1.20%	0.72%

Top twenty Direct Object/Substance by Age Groups

55.1%

Conclusion.

A clear pattern emerges from IDB-FDS data descriptive analysis of external causes of home injury for risk groups and circumstances related to injury.

Home accidents are a major cause of morbidity, mostly affecting the elderly especially by falling on the floor and with fracture of Hip/Upperleg-thigh as a consequence. A hospitalization for these events lasts on average over two weeks with often permanent sequelae. Other risk groups highlighted by IDB-FDS data are children (due to play activity) and housewives in Cooking, cleaning activity.