

# INJURY DATABASE (IDB)

**Gozo General Hospital  
Admitting and Emergency Department**



January – December 2007

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# **INTRODUCTION**

## *Background*

Injury prevention has always been a priority within the European Union. Surveillance systems and data collection concerning injuries have highlighted the importance of the setting up of preventive interventions. Data collection of injuries started in 1996 within the European Union, and has been improved through an ongoing process since then. The system used to be known as the European Home and Leisure Accidents Surveillance System. Nowadays injury data within the EU is stored within the Injury Data Base (IDB).

The scope of this IDB is to record information of all injuries and accidents attended to at selected emergency departments within the European Union. Project managers from various European Union countries together with experts in the field have held several meetings with the aim of harmonising and standardizing accident and injury surveillance in the European Union.

## ***Launch of IDB in Malta***

The Injury Data Base was officially launched in Malta in September 2004. The Department of Health Information (DHI) is the responsible body for the compilation of such data. During 2005 a pilot project was initiated at the Gozo General Hospital (GGH) whereby accidents and injuries are recorded at its Admitting & Emergency (A & E) Department.

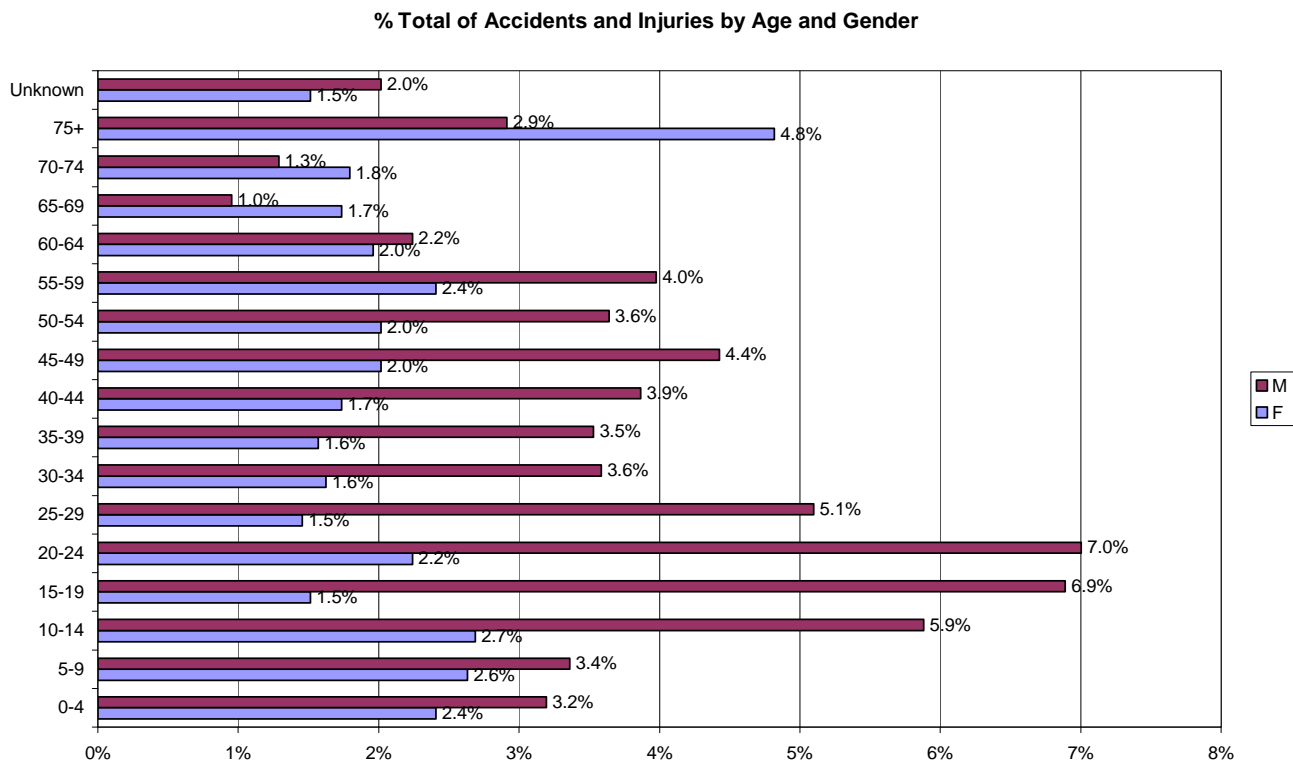
On arrival of the patient at the A & E Department, responsible staff, fill in the special form (Annex 1) with standard information which is harmonized with that collected in other Member States. Completed forms are then forwarded to DHI on a regular basis where they are coded against the IDB Coding Manual Data Dictionary issued by the EU-funded Consumer Safety Institute in Amsterdam. All data is then entered into the main database and is kept in accordance with the Data Protection Act, 2001.

## **Present Report**

This report records admissions at the A & E Department at Gozo General Hospital for 2007.

Accuracy and completeness of data sent on the IDB reporting forms is the responsibility of the department providing the data. To enhance collection and quality data, an official from the Department of Health Information and Research visits GGH on a regular basis to collect further information.

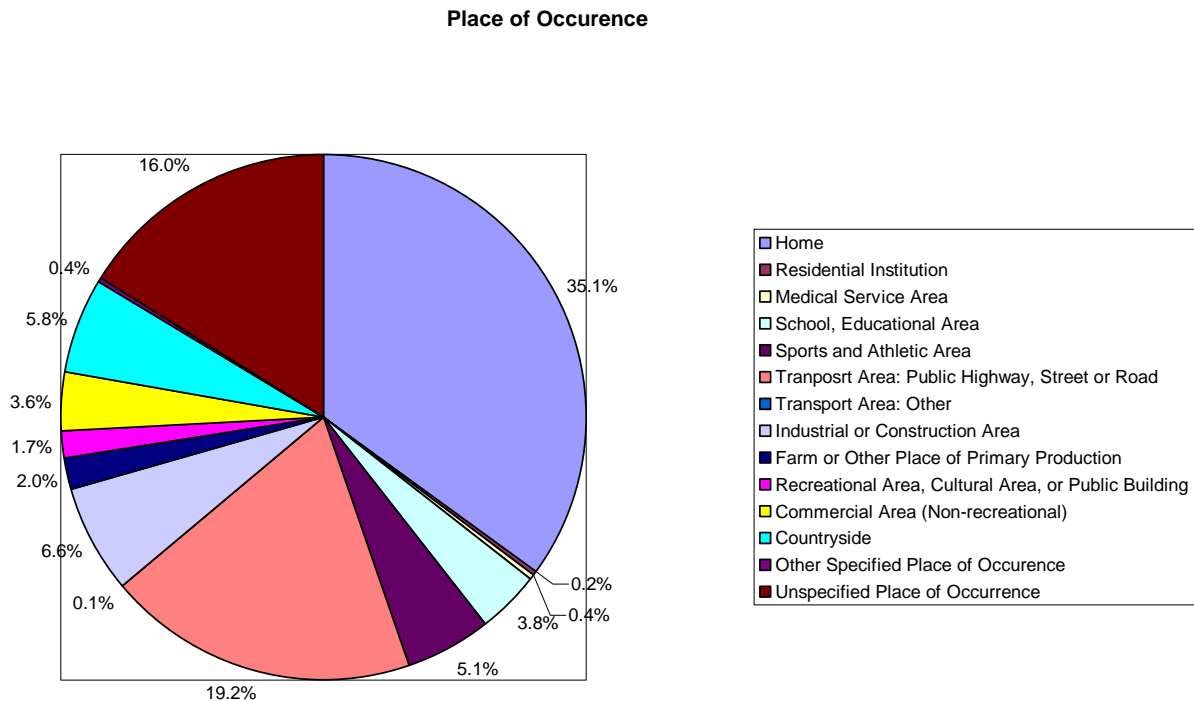
## Total Accidents and Injuries by Age and Gender



The figure above shows the total number of persons presenting following accidents and injuries by age groups and gender as a percentage of the total recorded at the A & E Department of Gozo General Hospital. The number of injured persons presenting at the A & E amounted to 1,785 of which 645 (36.13%) were females and 1,140 (63.87%) were males.

## Place of Occurrence

The place of occurrence refers to the place where the injured person was when the injury event started.



### Place of Occurrence as a % of Total Injuries recorded

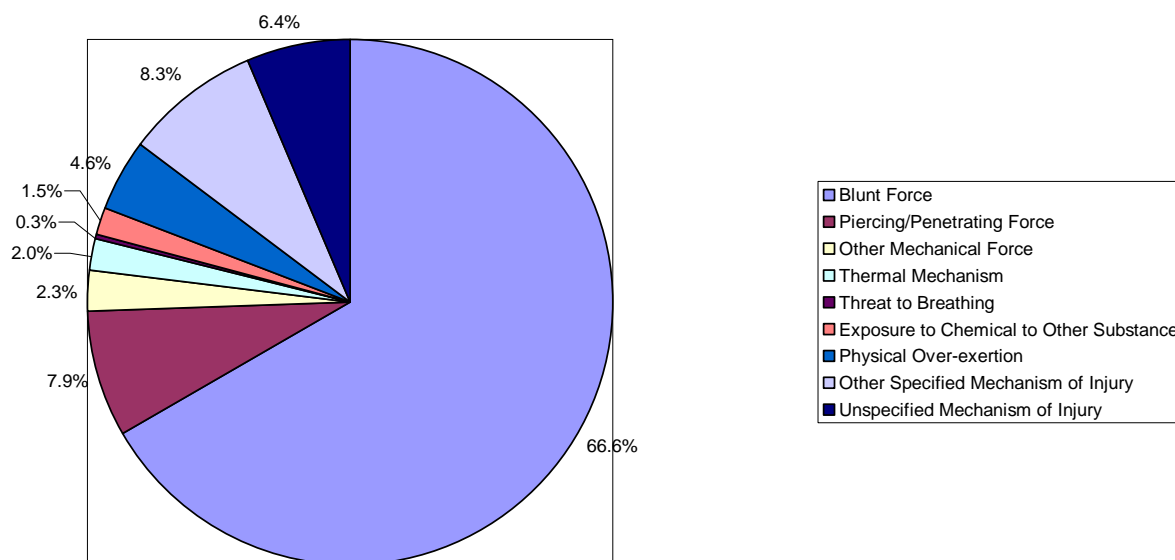
“Other specified place of occurrence” also included residential institutions, medical service areas.

Place of Accident	F	M	Total
Home	16.91%	18.19%	35.10%
Residential Institution	0.19%	0.00%	0.19%
Medical Service Area	0.13%	0.26%	0.38%
School, Educational Area	1.53%	2.30%	3.83%
Sports and Athletic Area	0.64%	4.47%	5.11%
Transport Area: Public Highway, Street or Road	8.23%	10.98%	19.21%
Transport Area: Other	0.06%	0.06%	0.13%
Industrial or Construction Area	0.13%	6.45%	6.57%
Farm or Other Place of Primary Production	0.00%	1.98%	1.98%
Recreational Area, Cultural Area, or Public Building	0.70%	0.96%	1.66%
Commercial Area (Non-recreational)	1.60%	1.98%	3.57%
Countryside	1.98%	3.83%	5.81%
Other Specified Place of Occurrence	0.06%	0.38%	0.45%
Unspecified Place of Occurrence	4.53%	11.49%	16.02%
Grand Total	36.69%	63.31%	100.00%

### **% “place of occurrence” by gender**

## Mechanism of Injury

Mechanism of Injury



The mechanism of injury defines the way the injury was sustained, that is, how the person was hurt. This results when human body is acutely exposed to some form of energy and sustains some form of damage. An injury may also be the result of insufficiency of any of the vital elements (eg drowning/near drowning, strangulation or freezing).

Two main mechanisms of injury are recorded, namely, underlying mechanisms (those involved at the start of the injury event) and direct mechanisms (those producing the actual physical harm).

Mechanism of Injury	F	M	Total
Blunt Force	26.71%	39.94%	66.65%
Piercing/Penetrating Force	2.22%	5.71%	7.93%
Other Mechanical Force	0.06%	2.27%	2.33%
Thermal Mechanism	0.76%	1.22%	1.98%
Threat to Breathing	0.29%	0.06%	0.35%
Exposure to Chemical to Other Substance	0.52%	0.93%	1.46%
Physical Over-exertion	2.16%	2.45%	4.61%
Other Specified Mechanism of Injury	1.40%	6.94%	8.34%
Unspecified Mechanism of Injury	1.92%	4.43%	6.36%
Grand Total	36.03%	63.97%	100.00%

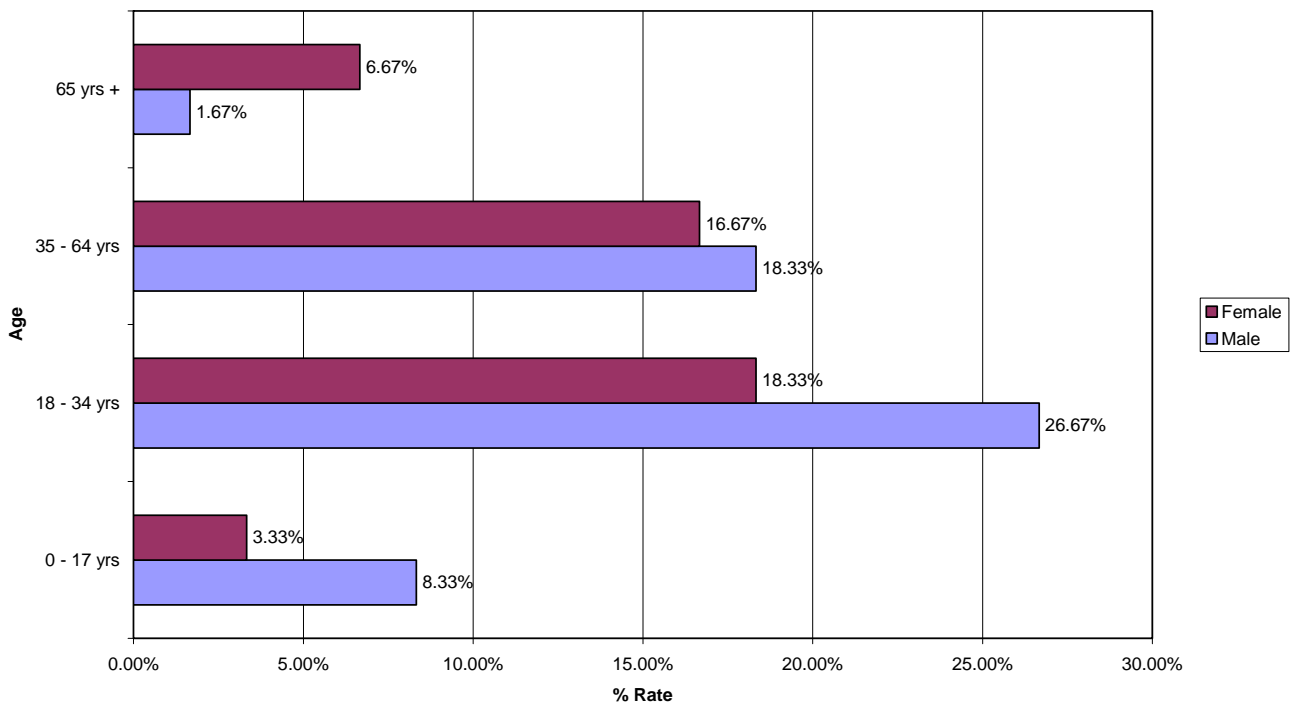
### % "Mechanism of Injury" by gender

## Transport Injury Events

Transport injury events include vehicle crashes and other injuries occurring in the course of transportation or involving devices being used primarily for conveying persons from one place to another.

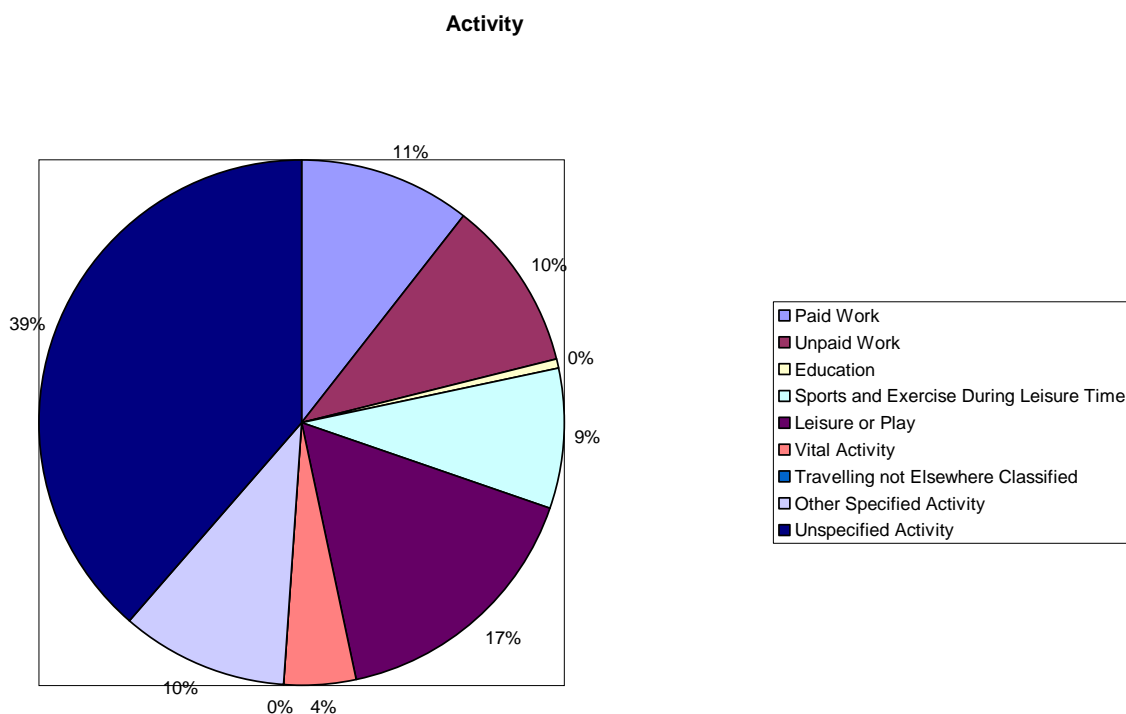
Transport devices include land transport vehicles, which may or may not be motor-driven. Persons recorded in this section may be both pedestrians or users of a transport device.

**% total of transport injury events subdivided by age and gender**



## Activity

The type of activity denotes the activity the injured person was engaged in when the injury occurred. Studies of activities leading to injuries that occur while a person is working or engaged in a sport may help in the development of more effective prevention strategies.



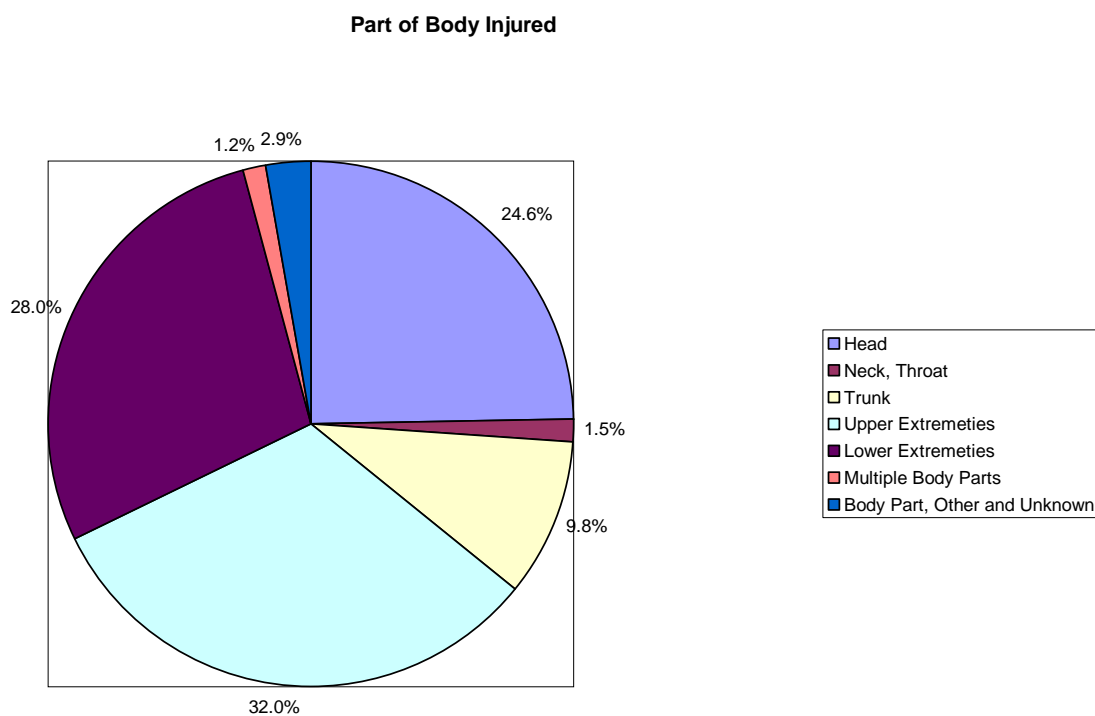
Activity	F	M	Total
Paid Work	0.87%	9.81%	10.68%
Unpaid Work	4.84%	5.57%	10.41%
Education	0.27%	0.20%	0.47%
Sports and Exercise During Leisure Time	1.48%	7.12%	8.60%
Leisure or Play	6.85%	9.67%	16.52%
Vital Activity	2.55%	1.75%	4.30%
Travelling not Elsewhere Classified	0.00%	0.07%	0.07%
Other Specified Activity	5.24%	5.24%	10.48%
Unspecified Activity	14.84%	23.64%	38.48%
Grand Total	36.94%	63.06%	100.00%

### **Total % of activity by gender**



## Part of Body Injured

The region or part of the body where the injury is located can be seen below.

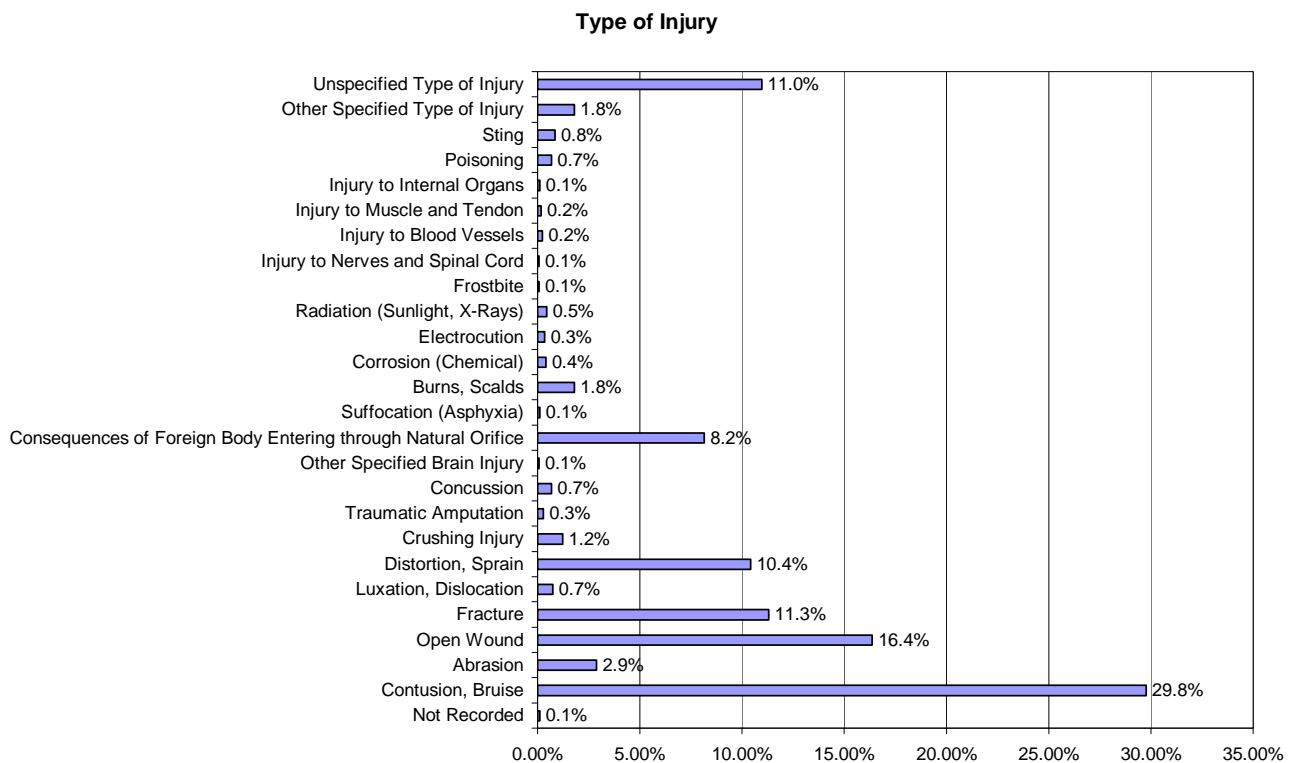


Part of Body Injured	F	M	Total
Head	6.87%	17.73%	24.59%
Neck, Throat	0.90%	0.56%	1.46%
Trunk	3.71%	6.13%	9.85%
Upper Extremities	10.52%	21.44%	31.96%
Lower Extremities	12.72%	15.31%	28.02%
Multiple Body Parts	0.28%	0.96%	1.24%
Body Part, Other and Unknown	1.18%	1.69%	2.87%
Grand Total	36.18%	63.82%	100.00%

### **Total % of part of body injured by gender**

## Type of Injury

The figure below shows the types of injuries as a percentage of all injuries in the database.



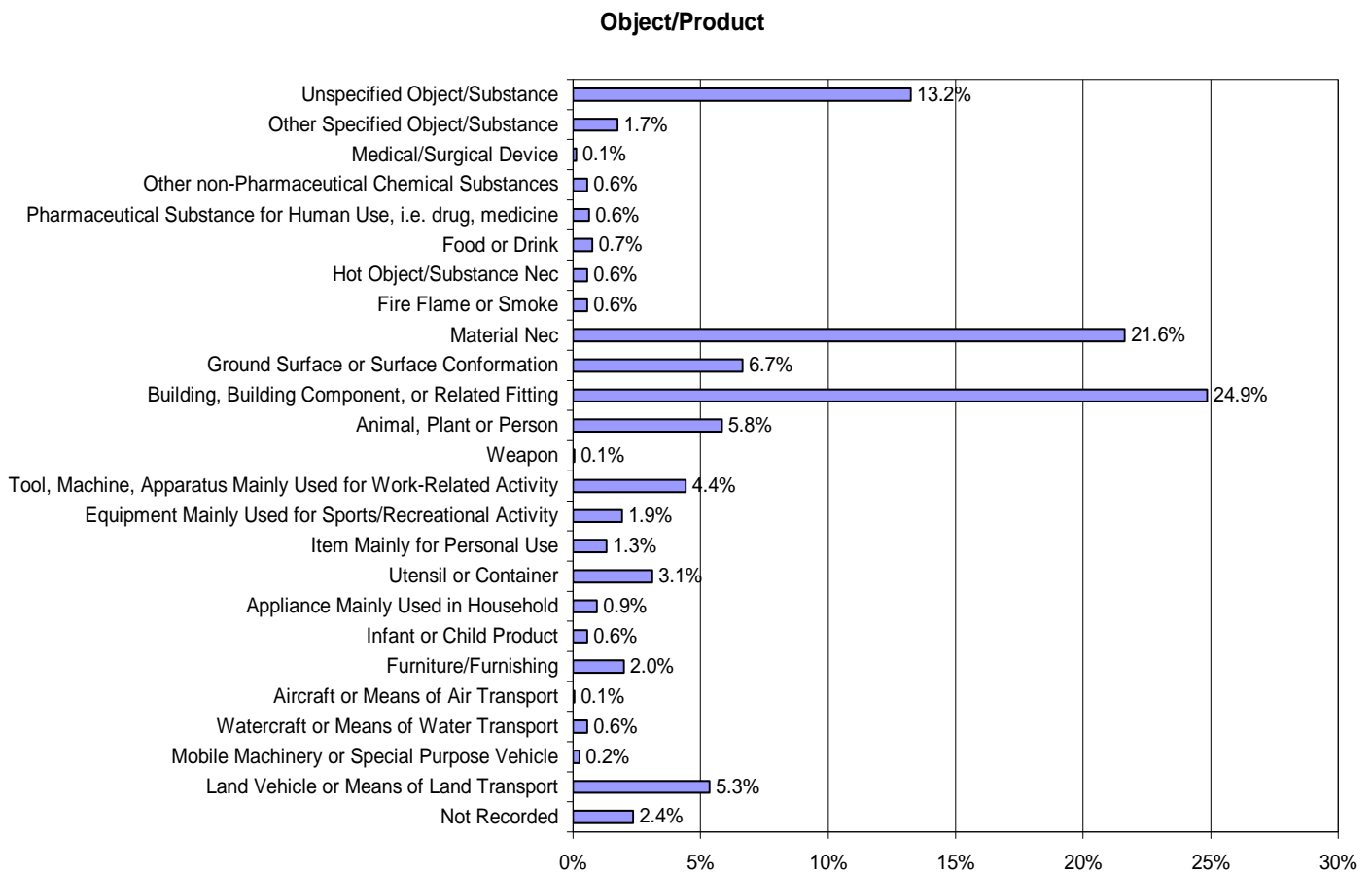
## **Types of injuries as a percentage of all injuries by gender**

Type of Injury	F	M	Total
No Injury	0.53%	1.02%	0.84%
Contusion, Bruise	19.75%	19.88%	19.83%
Abrasion	2.82%	5.23%	4.34%
Open Wound	18.17%	25.72%	22.94%
Fracture	19.22%	11.27%	14.19%
Luxation, Dislocation	0.71%	0.10%	0.32%
Distorsion, Sprain	15.17%	9.94%	11.86%
Crushing Injury	0.71%	1.54%	1.23%
Traumatic Amputation	0.18%	0.31%	0.26%
Concussion	0.88%	1.84%	1.49%
Consequences of Foreign Body	2.82%	8.50%	6.42%
Suffocation	0.35%	0.41%	0.39%
Burns, Scalds	2.82%	2.25%	2.46%
Corrosion	0.71%	0.20%	0.39%
Radiation	0.00%	0.72%	0.45%
Injury to Nerves and Spinal Cord	0.00%	0.10%	0.06%
Injury to Blood Vessels	0.53%	0.51%	0.52%
Injury to Muscle and Tendon	0.35%	0.20%	0.26%
Injury to Internal Organs	0.18%	0.20%	0.19%
Poisoning	0.88%	0.92%	0.91%
Stings	1.41%	0.20%	0.65%
Multiple Injuries	0.18%	0.10%	0.13%
Other	1.06%	1.13%	1.10%
Unspecified	10.58%	7.68%	8.75%

## Object/Product

Injuries are often the result of a sequence of events (matter, material or thing). Three types of objects/substances may be involved in the injury:

1. The indirect object/substance-the object/substance involved at the start of the injury event;
2. The direct object/substance - the object/substance producing the actual physical harm;
3. Intermediate object/substance – other objects/substances involved in the injury event.



**Total % of products involved in injuries**

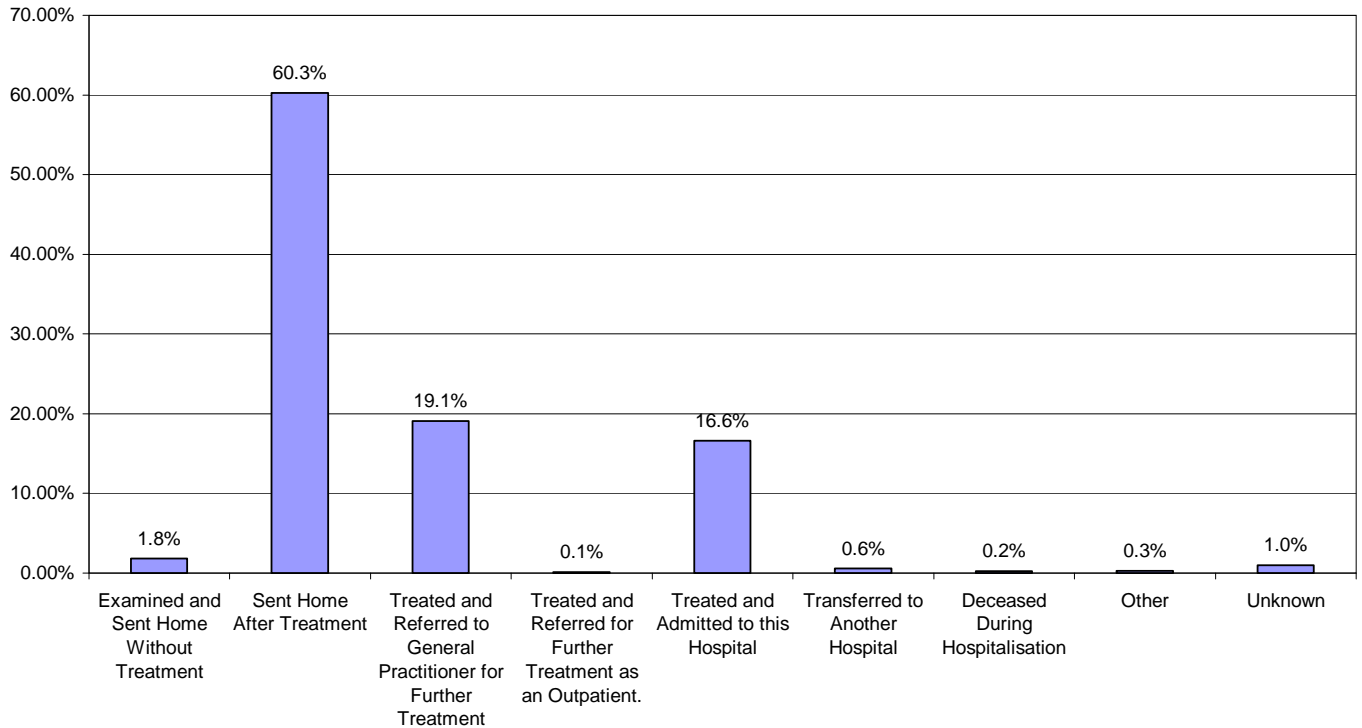
<b>Objects and Products</b>	<b>F</b>	<b>M</b>	<b>Total</b>
Not Recorded	1.12%	1.24%	2.36%
Land Vehicle or Means of Land Transport	2.36%	2.98%	5.34%
Mobile Machinery or Special Purpose Vehicle	0.00%	0.25%	0.25%
Watercraft or Means of Water Transport	0.31%	0.25%	0.56%
Aircraft or Means of Air Transport	0.00%	0.06%	0.06%
Furniture/Furnishing	0.75%	1.24%	1.99%
Infant or Child Product	0.25%	0.31%	0.56%
Appliance Mainly Used in Household	0.25%	0.68%	0.93%
Utensil or Container	1.12%	1.99%	3.11%
Item Mainly for Personal Use	0.62%	0.68%	1.31%
Equipment Mainly Used for Sports/Recreational Activity	0.50%	1.43%	1.93%
Tool, Machine, Apparatus Mainly Used for Work-Related Activity	0.37%	4.04%	4.41%
Weapon	0.00%	0.06%	0.06%
Animal, Plant or Person	1.24%	4.60%	5.84%
Building, Building Component, or Related Fitting	13.55%	11.31%	24.86%
Ground Surface or Surface Conformation	1.86%	4.79%	6.65%
Material Nec	6.46%	15.16%	21.63%
Fire Flame or Smoke	0.06%	0.50%	0.56%
Hot Object/Substance Nec	0.19%	0.37%	0.56%
Food or Drink	0.50%	0.25%	0.75%
Pharmaceutical Substance for Human Use, i.e. drug, medicine	0.44%	0.19%	0.62%
Other non-Pharmaceutical Chemical Substances	0.00%	0.56%	0.56%
Medical/Surgical Device	0.06%	0.06%	0.12%
Other Specified Object/Substance	0.25%	1.49%	1.74%
Unspecified Object/Substance	4.04%	9.20%	13.24%

**% of Products involved in accidents by gender**

## Treatment and Follow up

This denotes the status of treatment of the injured person after attendance at the Emergency Department. This parameter relates to the severity of injuries and hence gives an indication of the burden of injuries.

Treatment and Follow-up



## Treatment and follow-up as a % of total injuries recorded

Treatment and Follow Up	F	M	Total
Examined and Sent Home Without Treatment	0.90%	0.95%	1.85%
Sent Home After Treatment	19.94%	40.34%	60.28%
Treated and Referred to General Practitioner for Further Treatment	7.39%	11.71%	19.10%
Treated and Referred for Further Treatment as an Outpatient.	0.00%	0.11%	0.11%
Treated and Admitted to this Hospital	7.11%	9.52%	16.64%
Transferred to Another Hospital	0.22%	0.34%	0.56%
Deceased During Hospitalisation	0.11%	0.11%	0.22%
Other	0.11%	0.17%	0.28%
Unknown	0.34%	0.62%	0.95%
Grand Total	36.13%	63.87%	100.00%
Examined and Sent Home Without Treatment	0.90%	0.95%	1.85%
Sent Home After Treatment	19.94%	40.34%	60.28%

## % of "Treatment and follow-up" by gender

## **Acknowledgements:**

In the compilation of this report, we would like to thank Dr. Neville Calleja, Director Health Information and Research, Dr. Frank Calleja and Dr. Kathleen England, for providing cross linkages with their registers, Hospital Information Systems and National Death Register respectively to refine IDB data. Appreciation goes to Ms. Marilou Muscat for her patience and dedication in data entry process and Ms. Claudia Angele Galea, student, for providing the tables.

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