

Injury Database (IDB)

Annual Report 2009



**Gozo General Hospital-Accident &Emergency
Department**

Ms. Audrey Galea

Contents

Introduction	3
Accidents by age and gender	4
Place of Occurrence	5
Mechanism of Injury	7
Transport Injury Events	9
Activity when Injured	10
Part of Body Injured	12
Type of Injury	14
Object/Products Involved	16
Treatment and Follow up	18
Acknowledgements	19

Introduction

Since 1996 the EU has started to collect data as regards injuries from its member states. This has evolved into the Injuries Database (IDB). The aim of this is the collection of data as regards all injuries and accidents attended to by the accident and emergency units of the whole EU.

The IDB is under the remit of the Department of Health Information and Research. Since 2005 a pilot project has been initiated at the Gozo General Hospital collecting all data on accidents and injuries.

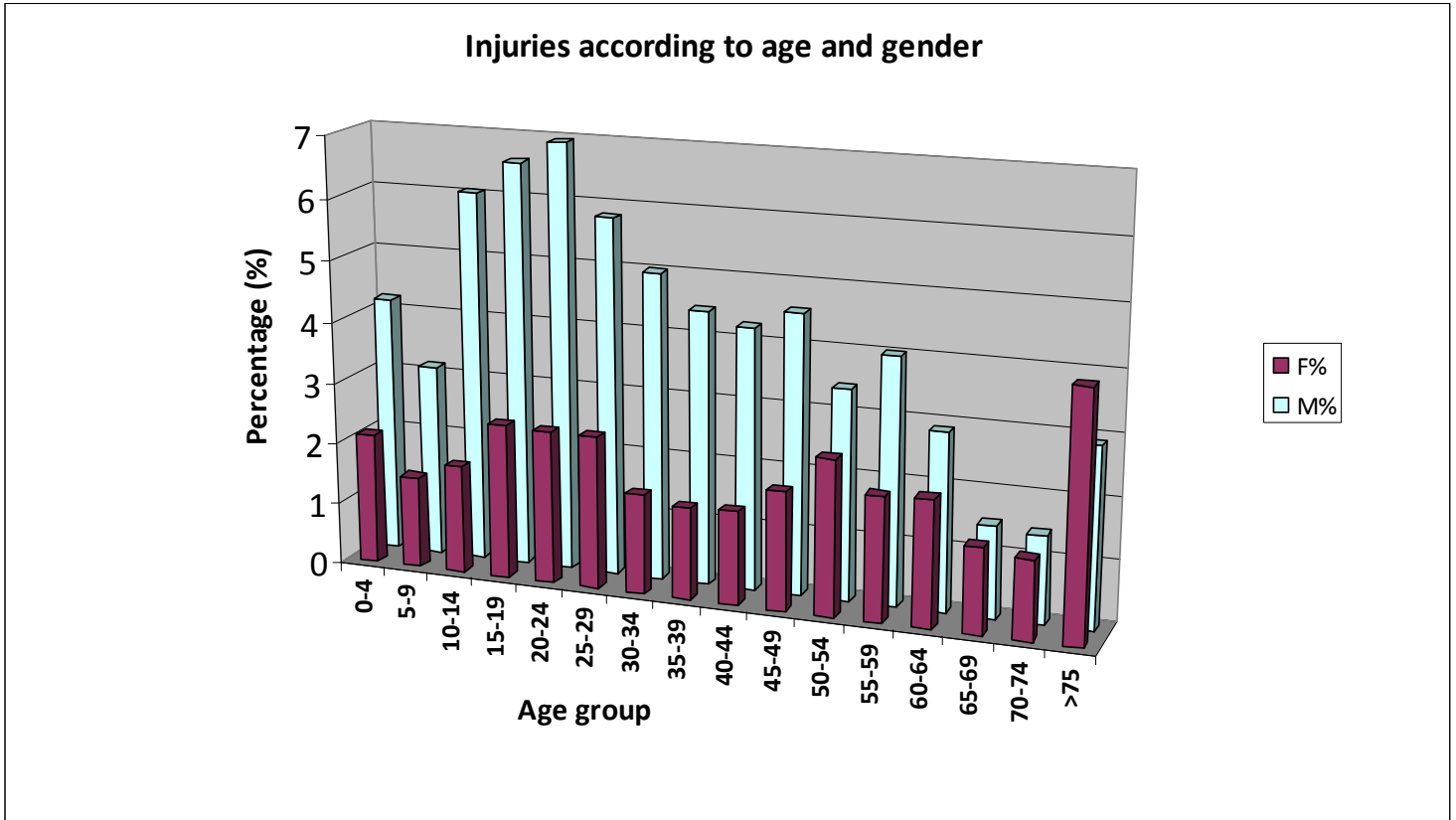
On arrival to A & E department, trained staff complete the IDB form (Annex 1) with the required information. This information has been standardised throughout the whole of the member states so as to be able to ensure comparability. The completed forms are sent periodically to the DHIR where they are coded against the IDB Coding Manual Data Dictionary issued by the EU-funded Consumer Safety Institute in Amsterdam. All data is then in-putted into the main database at the DHIR. Data confidentiality is a priority and all data handling is in accordance with the Data Protection Act of 2001.

This Report

The accidents and injuries which took place in 2009 were reported in the habitual manner. In this report emphasis was placed on the difference in the patterns of injuries which occurred according to gender.

This report records all admissions to the A & E department of GGH with an accident or an injury. The accuracy and completeness of the data compiled on the IDB reporting a form is the responsibility of the organization responsible for data collection. In an effort to ensure to ensure standardisation and completeness of data collection, the DHIR staff frequently visit the GGH staff, providing continuous guidance and support on the collection of IDB data.

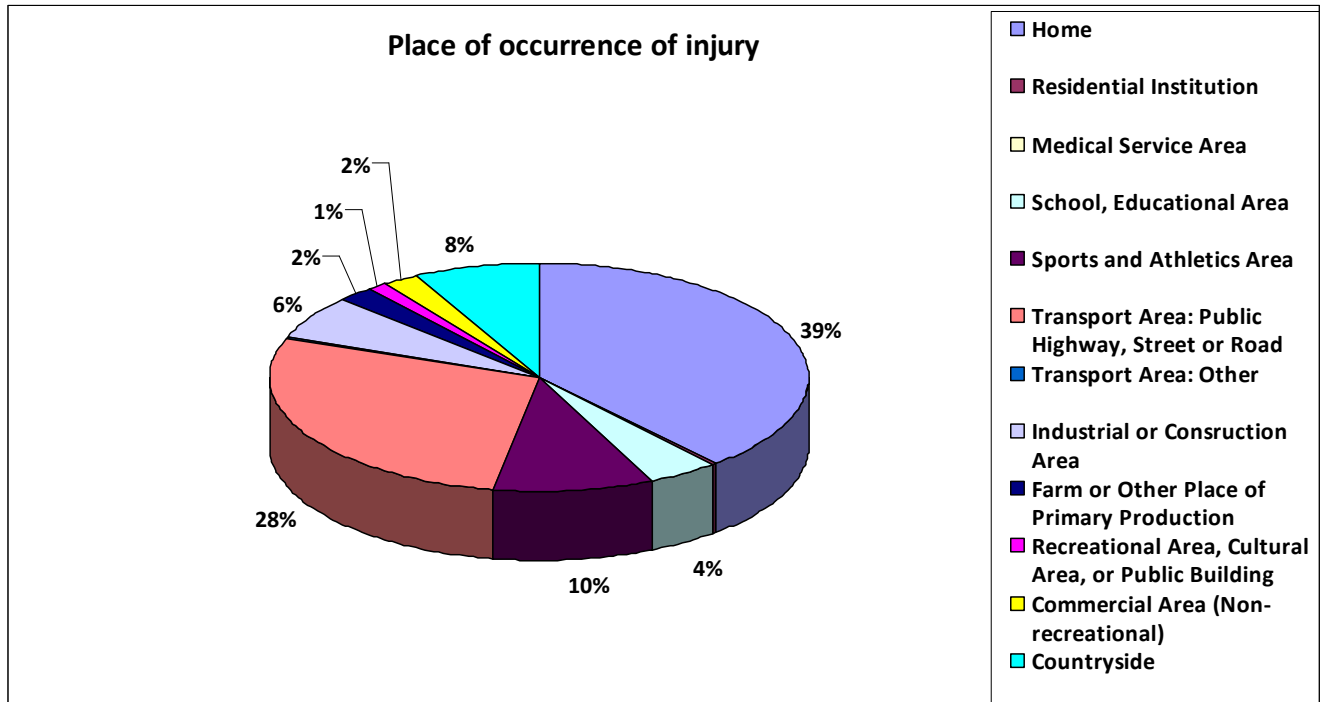
Accidents and injuries according to age and gender



In 2009 there were a total of 3007 cases presenting to the A & E department of GGH. Of these 67 % were men and 33 % were women. Injuries were reported to occur most commonly in men in the age group 20-24 whilst the females beyond 75 years of age were most commonly injured.

Place of Occurrence of Injury

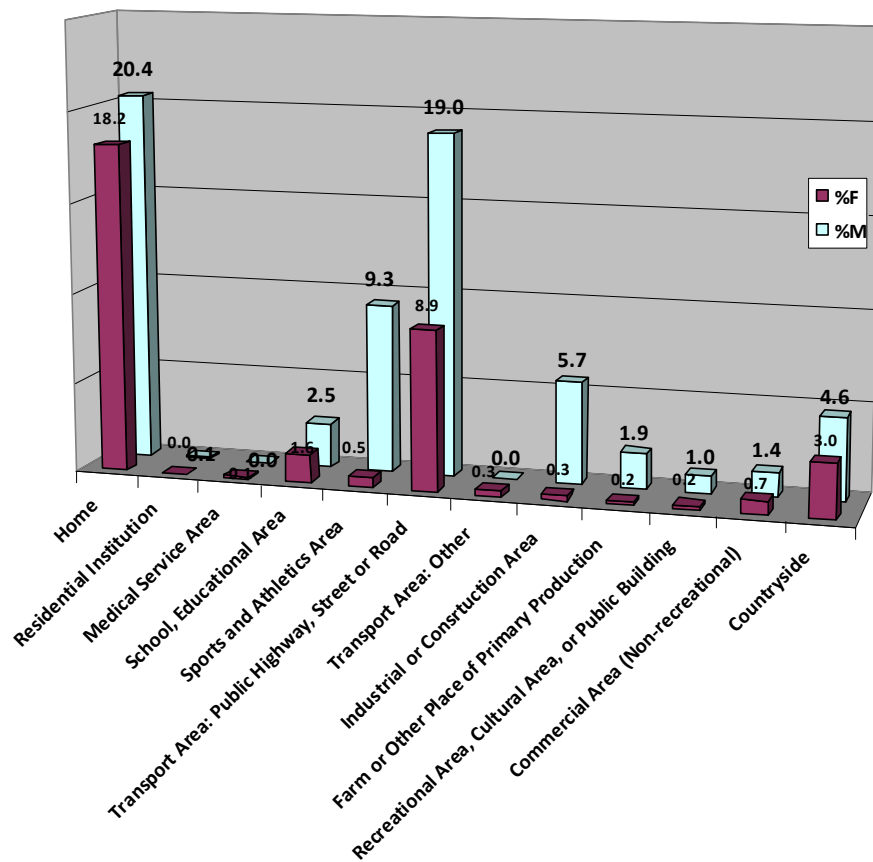
This refers to the place where the injured person was when the injury event started.



	Females	%F	Males	%M	Total	%T
<i>Home</i>	170	18.2	191	20.4	361	38.7
<i>Residential Institution</i>	0	0.0	1	0.1	1	0.1
<i>Medical Service Area</i>	1	0.1	0	0.0	1	0.1
<i>School, Educational Area</i>	15	1.6	23	2.5	38	4.1
<i>Sports and Athletics Area</i>	5	0.5	87	9.3	92	9.9
<i>Transport Area: Public Highway, Street o</i>	83	8.9	177	19.0	260	27.8
<i>Transport Area: Other</i>	3	0.3	0	0.0	3	0.3
<i>Industrial or Consrtuction Area</i>	3	0.3	53	5.7	56	6.0
<i>Farm or Other Place of Primary Productic</i>	2	0.2	18	1.9	20	2.1
<i>Recreational Area, Cultural Area, or Publ</i>	2	0.2	9	1.0	11	1.2
<i>Commercial Area (Non-recreational)</i>	7	0.7	13	1.4	20	2.1
<i>Countryside</i>	28	3.0	43	4.6	71	7.6
Grand Total	319	34.2	615	65.8	934	100.0

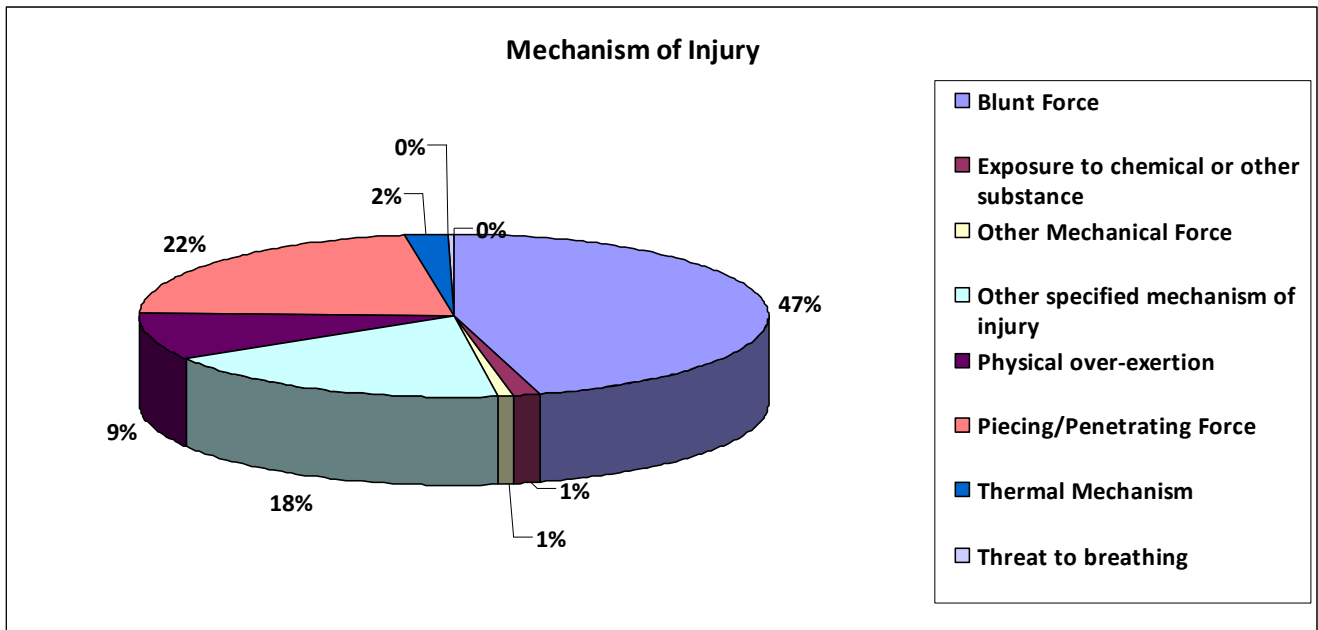
If one had to consider this data according to gender, it would be apparent that the most common place of occurrence of injury for both genders is at home, 20.4% and 18.2% for males and females respectively. However, it may be noted that men are much more commonly injured in transport areas including public highways and streets (19% vs. 8.9%) and in sports and athletics areas (9.3% vs. 0.9%) as compared to women.

Place of occurrence of injuries according to gender



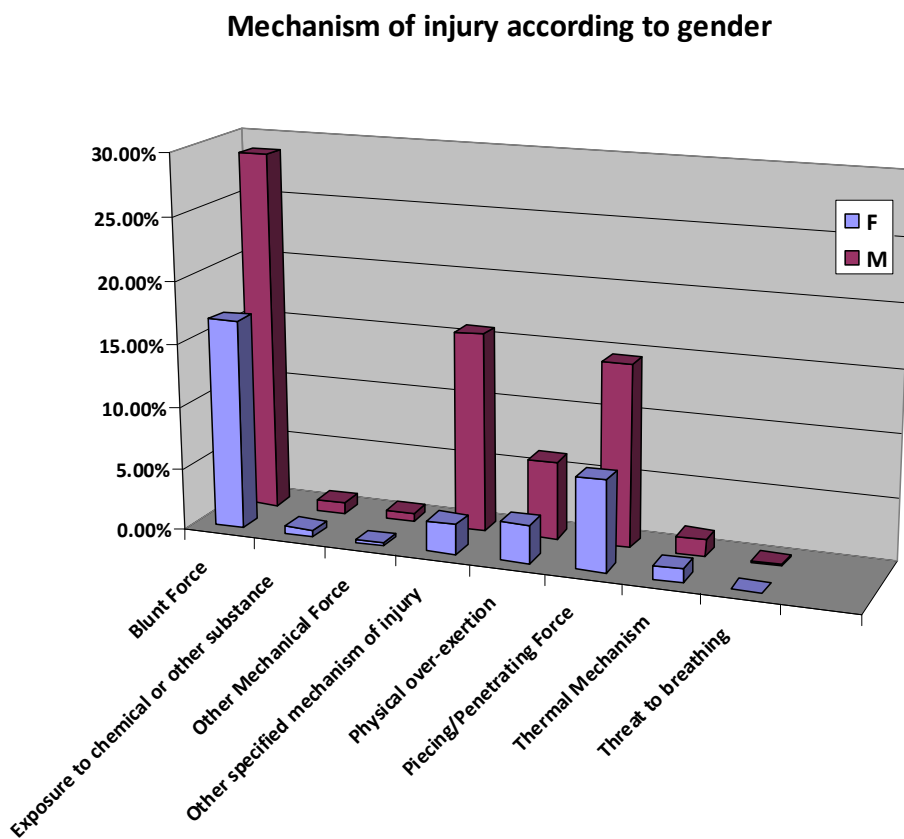
Mechanism of Injury

This refers to the way in which the injury was sustained (i.e., how the person was hurt.)



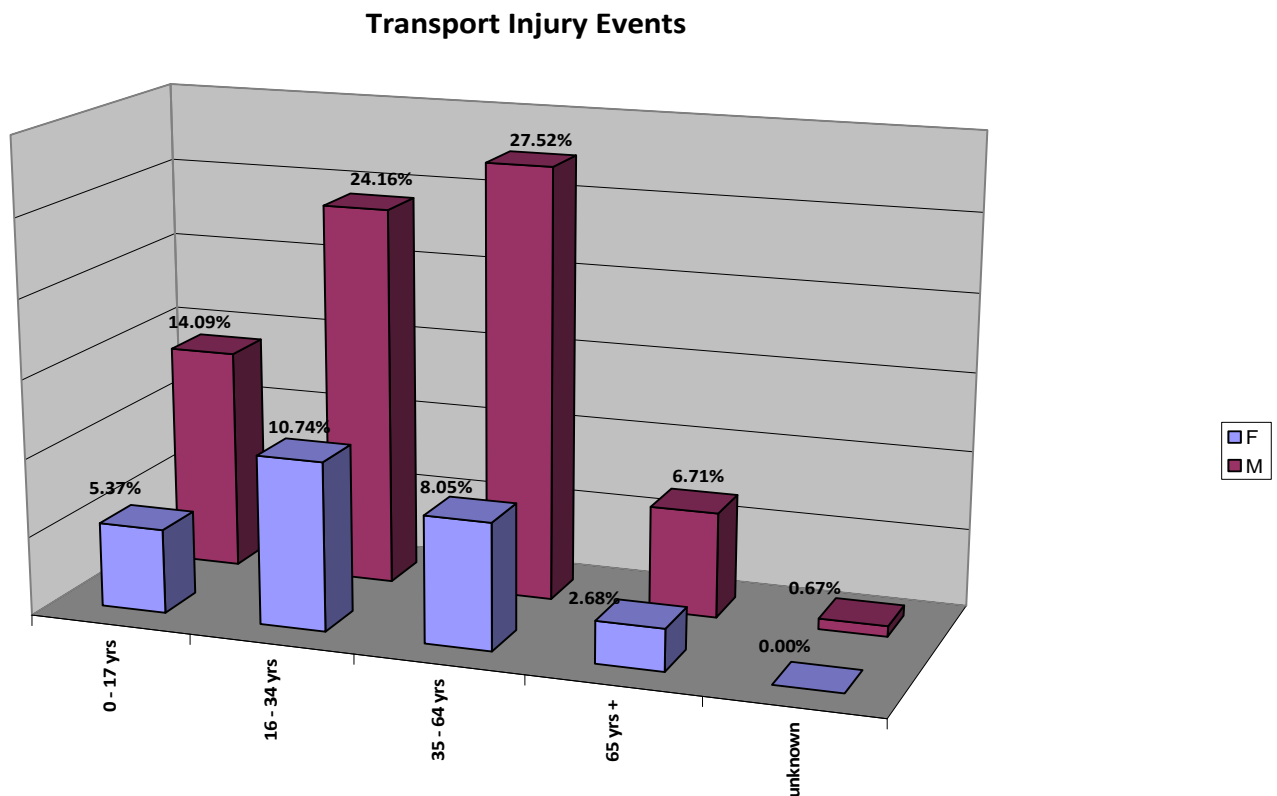
	F	M	Grand Total
Blunt Force	16.78%	28.76%	45.54%
Exposure to chemical or other substance	0.56%	0.88%	1.44%
Other Mechanical Force	0.19%	0.70%	0.88%
Other specified mechanism of injury	2.46%	15.89%	18.36%
Physical over-exertion	3.07%	6.18%	9.25%
Piecing/Penetrating Force	7.30%	14.64%	21.93%
Thermal Mechanism	1.07%	1.39%	2.46%
Threat to breathing	0.00%	0.14%	0.14%
Grand Total	31.41%	68.59%	100.00%

Blunt force is the most common mechanism of injury in both genders. Some gender differences in the mechanisms of injury according to gender may be noted below.



Transport Injury Event

A transport injury event is one which includes vehicle accidents and other injuries which occur during the course of transportation or any other machinery involved with the transport of persons. A transport device may include land transport vehicles (may or may not be motor driven). The persons injured may be both pedestrians and users of the mode of transport.

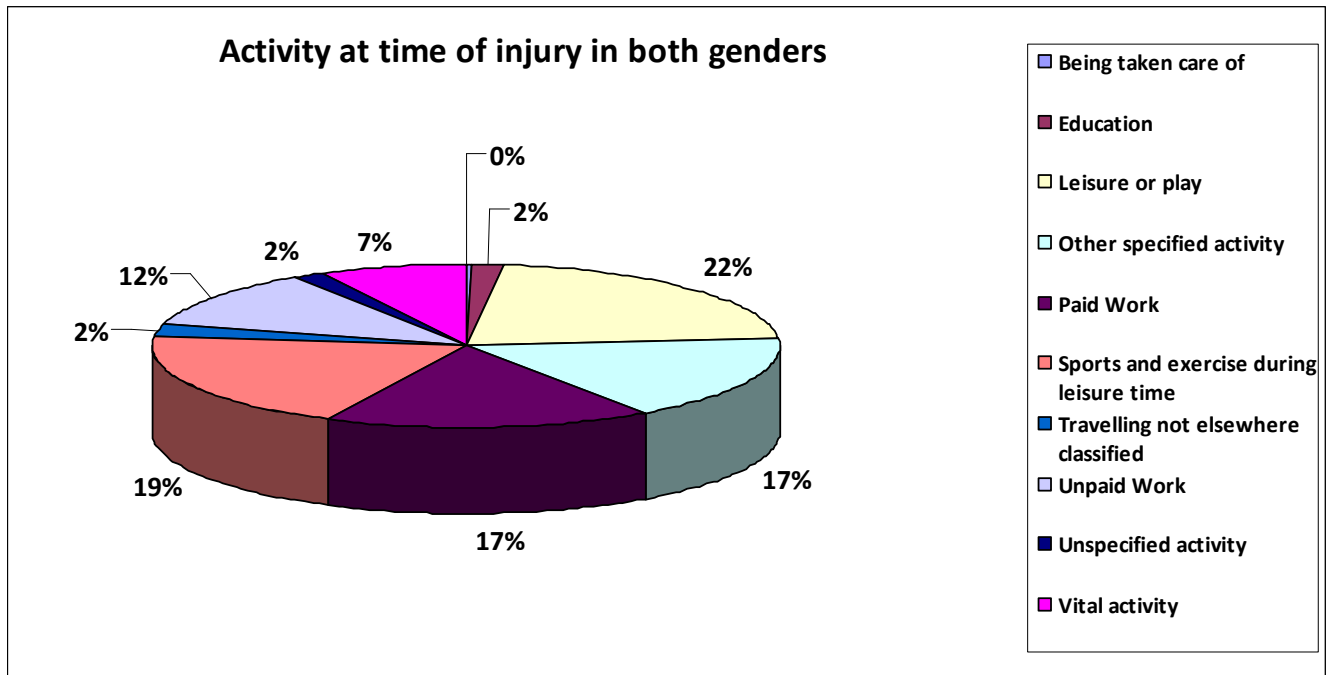


Age	F	M	Grand Total
0 - 17 yrs	5.37%	14.09%	19.46%
16 - 34 yrs	10.74%	24.16%	34.90%
35 - 64 yrs	8.05%	27.52%	35.57%
65 yrs +	2.68%	6.71%	9.40%
unknown	0.00%	0.67%	0.67%
Grand Total	26.85%	73.15%	100.00%

Overall, men were noted to be more likely to suffer a transport injury event with 73% of the events occurring in males. The age groups at which these types of injuries were the most common were the 35-64 year age group in males and the 16-34 year age group in females.

Activity when Injured

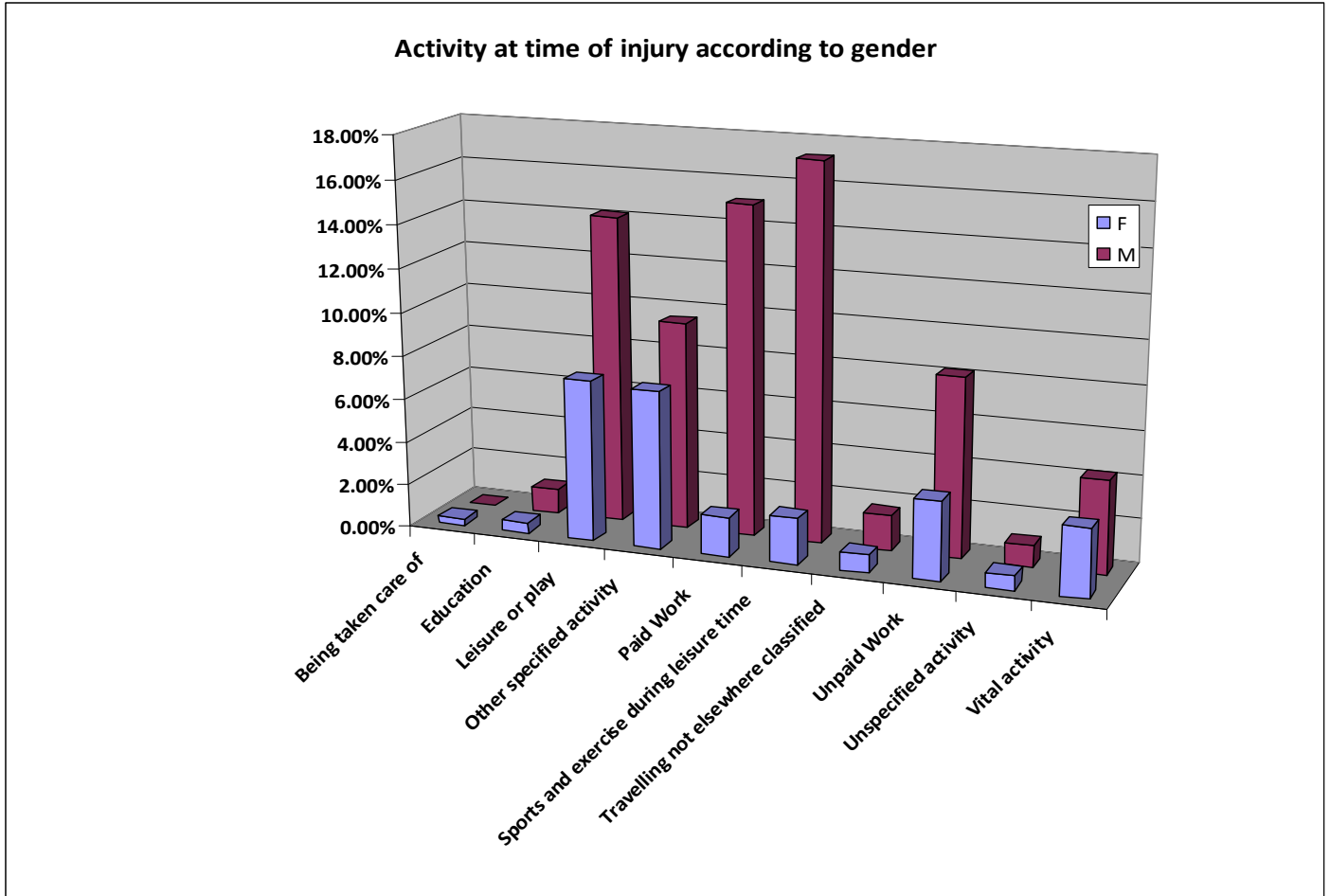
This refers to the type of activity which the individual was engaged in when the injury occurred



	F	M	Grand Total
<i>Being taken care of</i>	0.33%	0.00%	0.33%
<i>Education</i>	0.49%	1.15%	1.64%
<i>Leisure or play</i>	7.40%	14.14%	21.55%
<i>Other specified activity</i>	7.24%	9.54%	16.78%
<i>Paid Work</i>	1.81%	15.13%	16.94%
<i>Sports and exercise during leisure time</i>	2.14%	17.27%	19.41%
<i>Travelling not elsewhere classified</i>	0.82%	1.64%	2.47%
<i>Unpaid Work</i>	3.62%	8.22%	11.84%
<i>Unspecified activity</i>	0.66%	0.99%	1.64%
<i>Vital activity</i>	3.13%	4.28%	7.40%
Grand Total	27.63%	72.37%	100.00%

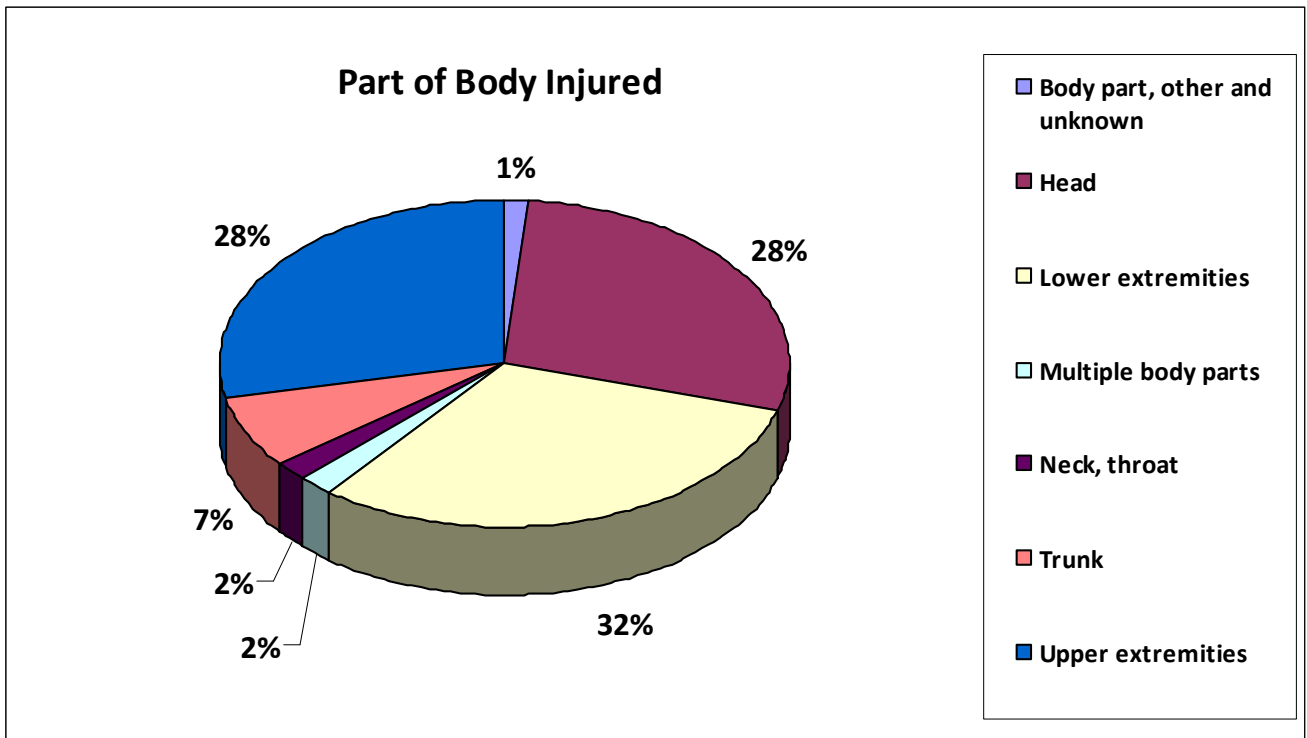
There are remarkable gender differences in the type of activity being carried out at the time of injury. Men are most frequently injured whilst performing sports and exercise during leisure time followed by activities during time of work and other activities during times of

leisure, 17.2%, 15.1% and 14.1% respectively. Women are most often injured during leisure or play times and other specified activity 7.4% and 7.24% respectively.



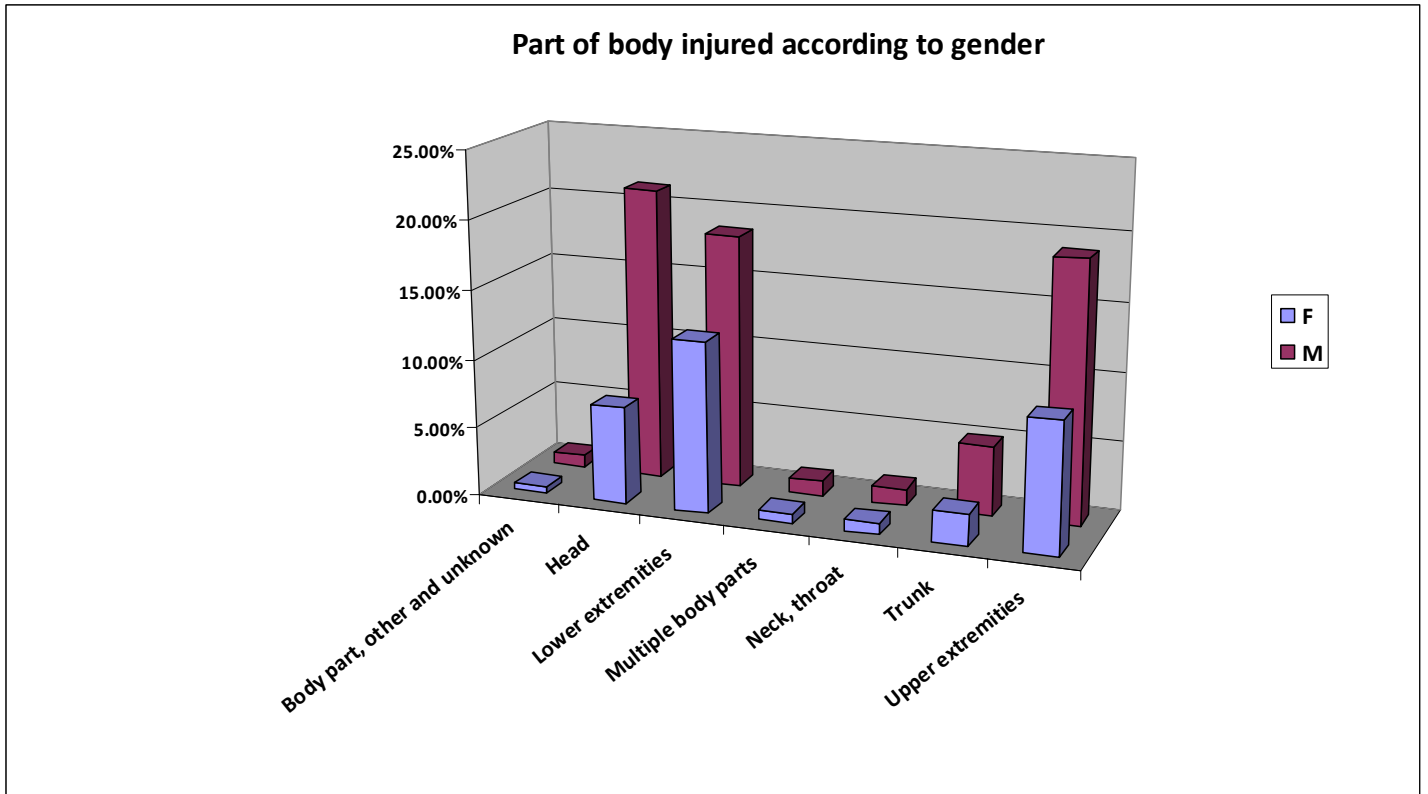
Part of Body Injured

This refers to the region or the body part where the injury is located.



	F	M	Grand Total
<i>Body part, other and unknown</i>	0.50%	0.87%	1.37%
<i>Head</i>	7.02%	21.29%	28.31%
<i>Lower extremities</i>	12.37%	18.49%	30.86%
<i>Multiple body parts</i>	0.75%	1.09%	1.83%
<i>Neck, throat</i>	0.81%	1.21%	2.02%
<i>Trunk</i>	2.27%	5.03%	7.30%
<i>Upper extremities</i>	9.48%	18.83%	28.31%
Grand Total	33.19%	66.81%	100.00%

Men most frequently suffer injuries to their head (21.3%) followed by both their upper and lower extremities 18.8%, 18.49% respectively. Women most frequently suffer injuries to their lower extremities (12.4%) followed by injuries to their upper extremities (9.5%) and their head (7.0%)



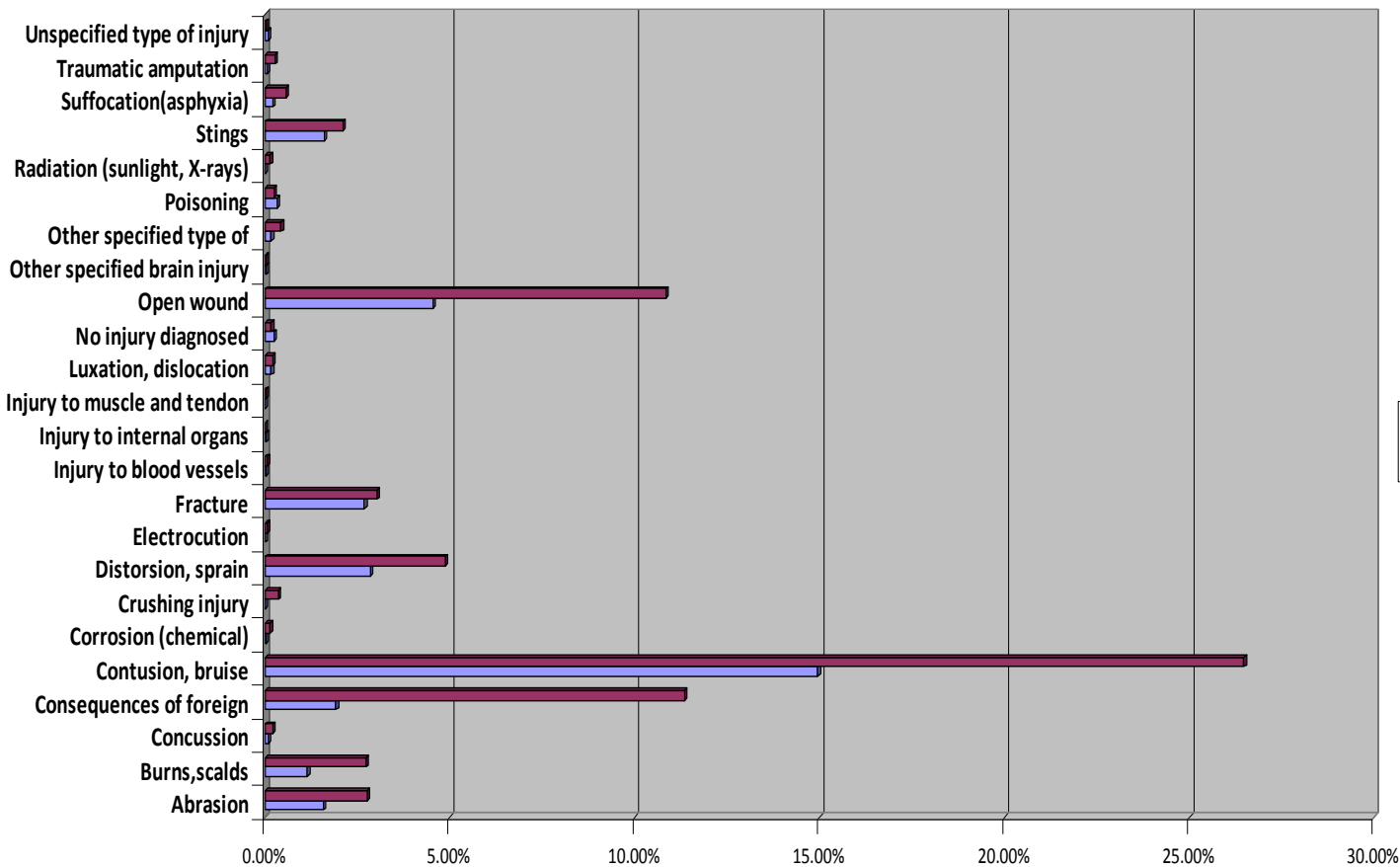
Type of Injury

This refers to the type of injury sustained

	F	M	Grand Total
<i>Abrasion</i>	1.58%	2.76%	4.34%
<i>Burns,scalds</i>	1.15%	2.73%	3.87%
<i>Concussion</i>	0.10%	0.20%	0.30%
<i>Consequences of foreign body entering through natural orifice</i>	1.92%	11.35%	13.27%
<i>Contusion, bruise</i>	14.95%	26.47%	41.43%
<i>Corrosion (chemical)</i>	0.03%	0.13%	0.17%
<i>Crushing injury</i>	0.00%	0.37%	0.37%
<i>Distorsion, sprain</i>	2.86%	4.88%	7.75%
<i>Electrocution</i>	0.00%	0.07%	0.07%
<i>Fracture</i>	2.69%	3.03%	5.73%
<i>Injury to blood vessels</i>	0.03%	0.07%	0.10%
<i>Injury to internal organs</i>	0.03%	0.00%	0.03%
<i>Injury to muscle and tendon</i>	0.00%	0.03%	0.03%
<i>Luxation, dislocation</i>	0.17%	0.20%	0.37%
<i>No injury diagnosed</i>	0.24%	0.17%	0.40%
<i>Open wound</i>	4.55%	10.85%	15.39%
<i>Other specified brain injury</i>	0.03%	0.03%	0.07%
<i>Other specified type of injury</i>	0.17%	0.44%	0.61%
<i>Poisoning</i>	0.34%	0.24%	0.57%
<i>Radiation (sunlight, X-rays)</i>	0.00%	0.13%	0.13%
<i>Stings</i>	1.62%	2.12%	3.74%
<i>Suffocation(asphyxia)</i>	0.20%	0.57%	0.77%
<i>Traumatic amputation</i>	0.07%	0.27%	0.34%
<i>Unspecified type of injury</i>	0.10%	0.03%	0.13%
Grand Total	32.84%	67.16%	100.00%

It may be noted that the most common type of injury in both genders is a contusion or a bruise (M: 26.5%, F: 15%). In males, the next most frequent types of injuries are those in consequence to a foreign body entering through a natural orifice (11.4%) and open wounds (10.9%). In females the next most common injuries are open wounds (4.6%).

Type of injury according the gender



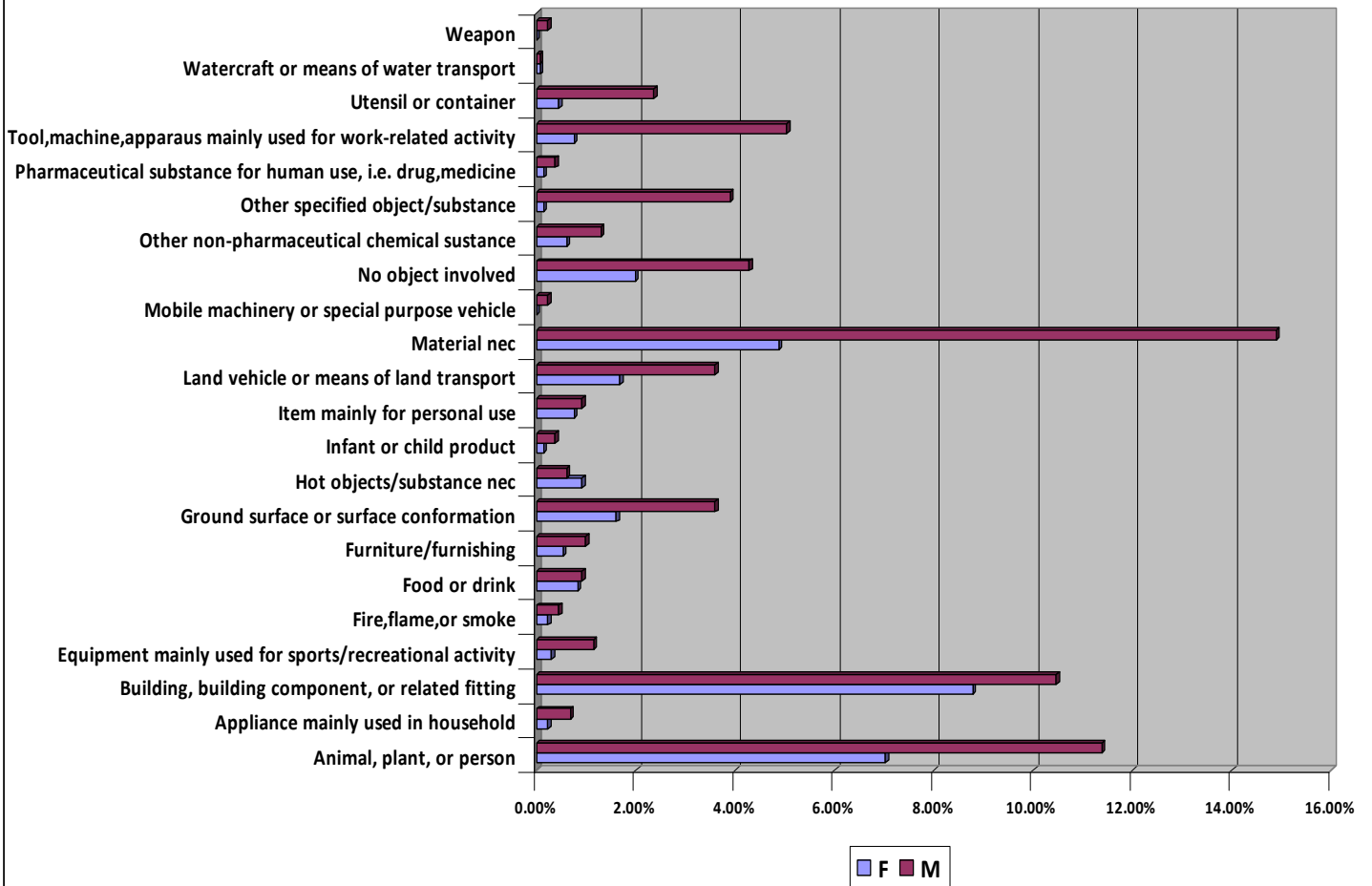
Object/substance producing the Injury

This refers to the matter, material of thing being involved in the injury event

	F	M	Grand Total
<i>Animal, plant, or person</i>	7.03%	11.38%	18.41%
<i>Appliance mainly used in household</i>	0.23%	0.69%	0.92%
<i>Building, building component, or related fitting</i>	8.79%	10.47%	19.25%
<i>Equipment mainly used for sports/recreational activity</i>	0.31%	1.15%	1.45%
<i>Fire, flame, or smoke</i>	0.23%	0.46%	0.69%
<i>Food or drink</i>	0.84%	0.92%	1.76%
<i>Furniture/furnishing</i>	0.53%	0.99%	1.53%
<i>Ground surface or surface conformation</i>	1.60%	3.59%	5.19%
<i>Hot objects/substance nec</i>	0.92%	0.61%	1.53%
<i>Infant or child product</i>	0.15%	0.38%	0.53%
<i>Item mainly for personal use</i>	0.76%	0.92%	1.68%
<i>Land vehicle or means of land transport</i>	1.68%	3.59%	5.27%
<i>Material nec</i>	4.89%	14.90%	19.79%
<i>Mobile machinery or special purpose vehicle</i>	0.00%	0.23%	0.23%
<i>No object involved</i>	1.99%	4.28%	6.26%
<i>Other non-pharmaceutical chemical substance</i>	0.61%	1.30%	1.91%
<i>Other specified object/substance</i>	0.15%	3.90%	4.05%
<i>Pharmaceutical substance for human use, i.e. drug, medicine</i>	0.15%	0.38%	0.53%
<i>Tool, machine, apparatus mainly used for work-related activity</i>	0.76%	5.04%	5.81%
<i>Utensil or container</i>	0.46%	2.37%	2.83%
<i>Watercraft or means of water transport</i>	0.08%	0.08%	0.15%
<i>Weapon</i>	0.00%	0.23%	0.23%
Grand Total	32.16%	67.84%	100.00%

From the chart below it may be noted that the most common object that men by which men were injured was 'material nec' (14.9%) whilst women were most frequently injured by means of a 'building, building component or related fitting' (8.79%).

Object/substance producing the injury

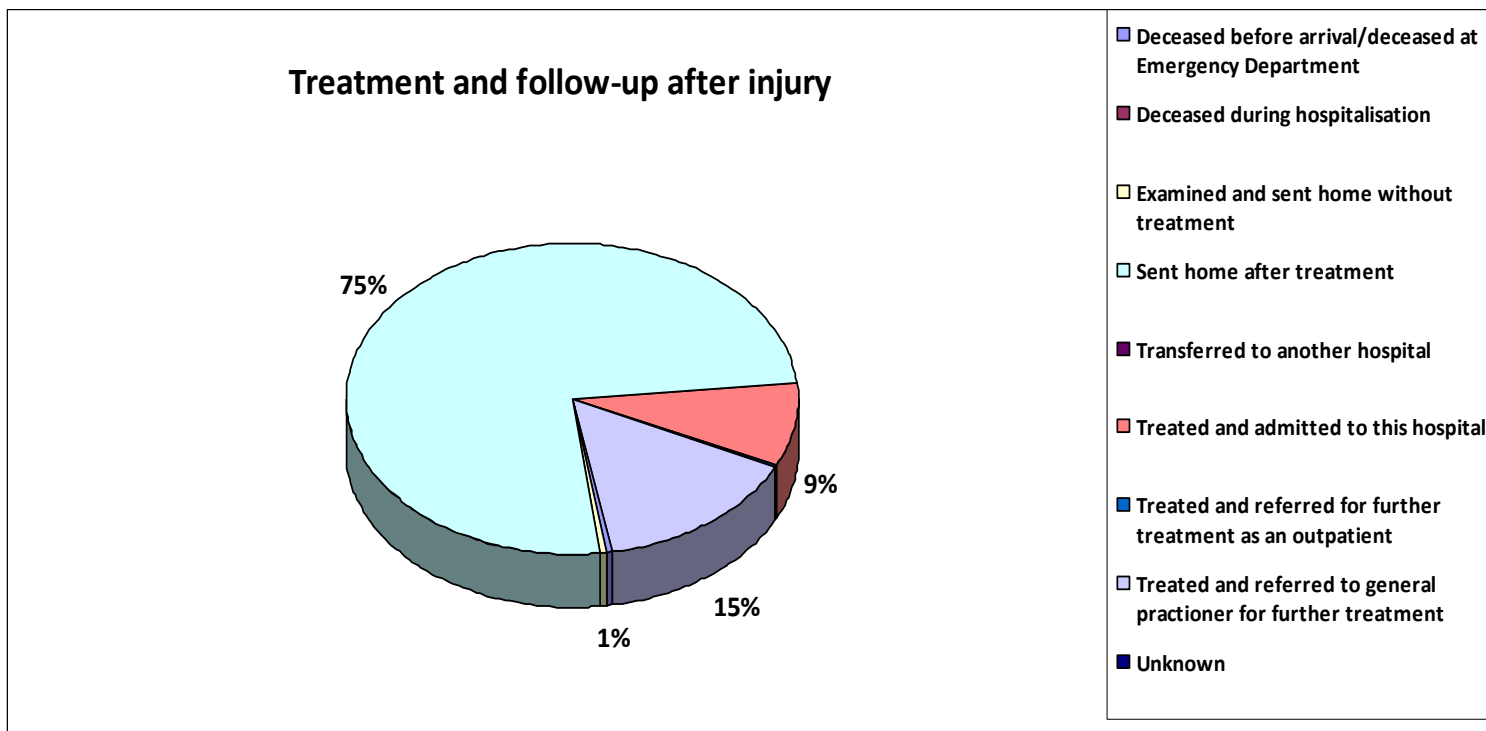


Treatment and Follow-up

This refers to the status of treatment after the attendance to the Emergency Department. This aims to give a simple indication of severity and the consequent burden due to the resulting injuries

	F	M	Grand Total
<i>Deceased before arrival/deceased at Emergency Department</i>	0.03%	0.17%	0.20%
<i>Deceased during hospitalisation</i>	0.03%	0.03%	0.07%
<i>Examined and sent home without treatment</i>	0.30%	0.30%	0.60%
<i>Sent home after treatment</i>	24.21%	51.01%	75.22%
<i>Transferred to another hospital</i>	0.00%	0.07%	0.07%
<i>Treated and admitted to this hospital</i>	3.62%	4.99%	8.61%
<i>Treated and referred for further treatment as an outpatient</i>	0.03%	0.10%	0.13%
<i>Treated and referred to general practioner for further treatment</i>	4.56%	10.48%	15.03%
<i>Unknown</i>	0.03%	0.03%	0.07%
Grand Total	32.82%	67.18%	100.00%

The chart below show the most common outcomes of treatment and follow-up after injury with 75% of all cases of injury being sent home after treatment



Acknowledgments

We would like to thank Dr. Neville Calleja, Director Health Information and Research, Dr. Frank Calleja and Dr. Kathleen England for their invaluable help. They provided opportunities for cross linking with the disease registers under their care so as to refine the IDB register data. Other appreciations go to Ms. Maryanne Magro and Ms. Diane Padley for their patience and dedication in data entry process and to Dr. Alexia Schembri for providing the charts and tables.

Acknowledgements go to Dr. A. Livori, Medical Administrator GGH, the Officers in charge and Ms. Catherine Vella, Officer i/c and Mr. Mario Borg, deputy Officer A & E Department GGH and the staff for their committed cooperation in view of the increase in information requirements to make this project possible.