

Republic Of Iraq

Ministry Of Health



# **Iraqi Injury Surveillance System**

**Annual Report - 2019**

**Edited By**  
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**Director Of Iraqi Injury Surveillance System**

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## Acknowledgments

We would like to acknowledge the efforts of the coroner office and emergency department staff in each of the reporting sites who have contributed to collecting and entering data, I would to express my deep thanks to Dr.Khitam M.Ali. FETP graduates for their role in review of the report.

We acknowledge Dr.Hanan Hasan from WHO Office in Iraq.

## Summary

The Iraqi injury surveillance system provides very important information about fatal and non-fatal injuries. Using this information will decrease the impact of injuries in community.

Data collected from all Iraqi governorates in sentinel hospitals for nonfatal injuries and from forensic medicine section for fatal injuries.

The report reveals that all governorates sent data during 2019, except Dohuk.

The total number of non-fatal injuries reported was (91,101), while the total fatal injuries were (11,754).

The surveillance report (2019) reveals that the male accounted for more than 76% of fatal and non-fatal injuries, the most common age group was (15-29) year.

According to governorates distribution, the highest number of non-fatal injuries was collected from ThiQar, Erbil and Basrah, while Fatal injuries mainly collected from Baghdad Forensic Medicine Office (F.M.O), then Najaf and Babil.

According to intention of injury, majority of non-fatal injuries were unintentional, followed by intentional injuries.

According to circumstances of injury, the main cause of non-fatal injuries was traffic injuries, then other injuries including (falls, burns, sharp tools and blunt injuries...).

Regarding traffic non-fatal injuries, the most common cause was car occupant, followed by motor cycle, and then pedestrian, while in fatal injuries car came first followed by pedestrian, then motorcycle.

The report reveals that street/high way /roads were the main locations for injuries, then homes and other places.

About 66 % of non-fatal injuries treated and sent home, but only 8 % of them arrived by ambulance and 14.5 % got medical care before emergency departments.

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## Introduction

Injuries are a major cause of morbidity and mortality in all countries. According to the World Health Organization (WHO), injuries kill more than 5 million people each year worldwide, accounting for about 9% of all global deaths. Eight of the top global twenty causes of death are injury related for the age group 15-29 years of age. In the Eastern Mediterranean Region, almost half a million people die of injuries every year, accounting for about 11% of all regional deaths. Injuries disproportionately affect young, active individuals. Global trends suggest that the burden of injuries is increasing.

Road injuries are projected to be one of the top five causes of death by 2030 (currently ranked seventh). The burden of self-harm as a mechanism of injury is also expected to increase (Table 1).

**Table (1); Top 20 Leading Causes of Deaths in the Eastern Mediterranean Region, Estimated Numbers in 2015 and Projected Number in 2030 . Source:**

[http://www.who.int/healthinfo/global\\_burden\\_disease/projections/en/](http://www.who.int/healthinfo/global_burden_disease/projections/en/)

Rank	2015	Rank	2030
1	Ischemic heart disease	1	Ischemic heart disease
2	Stroke	2	Stroke
3	Lower respiratory infections	3	Chronic obstructive pulmonary disease
4	Chronic obstructive pulmonary disease	4	Lower respiratory infections
5	Diarrheal diseases	5	Diabetes mellitus
6	HIV/AIDS	6	Trachea, bronchus, lung cancers
7	Trachea, bronchus, lung cancers	7	Road injury
8	Diabetes mellitus	8	HIV/AIDS
9	Road injury	9	Diarrheal diseases
10	Hypertensive heart disease	10	Hypertensive heart disease
11	Preterm birth complications	11	Cirrhosis of the liver
12	Cirrhosis of the liver	12	Liver cancer
13	Tuberculosis	13	Kidney diseases
14	Kidney diseases	14	Stomach cancer
15	Self-harm	15	Colon and rectum cancers
16	Liver cancer	16	Self-harm
17	Stomach cancer	17	Falls
18	Birth asphyxia and birth trauma	18	Alzheimer's disease and other dementias
19	Colon and rectum cancers	19	Preterm birth complications
20	Falls	20	Breast cancer

**In Iraq, injuries cause considerable morbidity and mortality. National estimates from the Ministry of Health (MOH) Annual Report 2014 suggest that deaths due to external causes of injuries were the second leading cause of death for all age groups excluding children under five. Global estimates also illustrate the disability resulting from injury, including ongoing conflict. According to the Global Burden of Disease Iraq profile, mechanical forces, interpersonal violence, road traffic injuries, fire, drowning, war and legal intervention were among the main causes of Years of Life Lost (YLL).**

**The Iraqi Injury Surveillance System was established to ensure systematic and ongoing data collection. The data is intended to be used for public health action. Between 2008 and 2013, the surveillance system has been piloted in Iraq. The pilot was initiated in 2008 with four provinces, scaled to eight provinces in 2009, and at the end of 2013 scaled nationally.**

**The surveillance system aims to determine the magnitude of the public health problem and trends, to identify risk groups in the community studied, allowing prioritization and planning of the necessary preventive programs, and enable research and assessment. Rigorous data ensures that interventions to mitigate injury can be data driven and evidence based.**

**This report presents the epidemiology of both fatal and non-fatal injuries. External injuries are described in terms of their magnitude, geographical distribution, time, intention, and mechanism of injury. During the period covered by this report data(2019) was collected from emergency departments in all directorates and coroner offices departments except Duhuk when both non-fatal and fatal injury data didn't send .**

**External injuries are considered as invisible epidemic across the world and as a global health problem. Particularly in countries experiencing war, injury surveillance is an important public health intervention.**

**The Iraqi Injury Surveillance System is implemented by the MOH in Baghdad and the MOH in Kurdistan. The project received technical support from the World Health Organization (WHO), United State Centers for Disease Control and Prevention (CDC).**

**Since the inception of this project, similar injury surveillance systems have been developed in the Kingdom of Saudi Arabia, Oman, Bahrain, Egypt and Uzbekistan with support of the WHO.**

## **Report Overview**

The current report contains four sections, including:

- 1- Description of the injury surveillance system in Iraq including development and rationale, system goals and objectives, methodology, definitions, data flow, ethics and limitations.**
- 2- Overview of the findings in 2019 for non-fatal injuries from data recorded at sentinel emergency departments**
- 3- Overview of key findings for 2019 for fatal injuries from data recorded at governorate level coroner offices**
- 4- Summary of key findings and recommendations for public health action based on these findings, as well as recommendations to address gaps and challenges facing the system.**

## **1. Description of the Iraqi Injury Surveillance System**

### **1.1 Development of the system**

Iraqi Injury Surveillance System has been gradually scaled up in Iraq. Data collection was first piloted beginning December 2008. Between 2009 and 2013, data on all causes of injury were collected from coroner offices and emergency departments in eight pilot governorates Al-Anbar, Baghdad, Basrah, Erbil, Kerbala, Misssan, Ninevah, and Al-Sulaimaniya.

Over the course of 2016-2017, the Injury Surveillance System gradually scaled up to include facilities in all 18 governorates of Iraq. Facilities in newly added governorates were trained on data collection and reporting beginning in June of 2013. Data from these facilities was included in the annual reports beginning in 2016-2017.

### **1.2 Goal and objectives of the system:**

The following are the goals of the Iraqi Injury Surveillance System:

- **Implement a national injury surveillance system that covers all Iraqi provinces.**
- **Describe the epidemiology of external injuries in Iraq in terms of the overall burden, geographic distribution, and temporal trends.**



- Provide an evidence base to inform public health interventions for those injured, including pre-hospital care.
- Inform prevention activities aimed at minimizing the burden of external injuries.

### 1.3 Methodology of Injury Surveillance System:

#### a. Injury Surveillance Case Definition

The case definition used by the Iraqi Injury Surveillance System includes all persons killed or injured as a result of an external injury, including both intentional and unintentional injuries. For non-fatal injuries a case is defined as the first visit to the emergency department for each person with external injury, regardless of the number of injuries. The injured person with the second (or subsequent) visit due to the same external cause of injury is not considered a case. External injury includes, but is not limited to, injuries resulting from the following mechanisms – road traffic crashes, falls, fires, electricity, drowning, poisonings, natural disasters, shooting, shelling, suicide bombings and terrorist attacks. Injuries resulting from landmines or explosive remnants of war (ERWs) are included. Sexual assaults and legal intervention (action by police) are excluded.

#### b. Reporting Sites

The Injury Surveillance System includes both fatal and non-fatal injury surveillance.

Fatal injuries are reported by the central coroner offices or forensic institute in each health directorate. Each health directorate has one, and only one, facility that is responsible for examining injuries and issuing death certificates. Therefore the surveillance system *aims to capture all fatal injuries* in participating directorates. Fatal injury surveillance is exhaustive.

Non-fatal injury surveillance, by contrast, is sentinel surveillance. Within each directorate, there are 1-3 hospitals reporting. Sentinel hospitals are primarily large public, general hospitals serving both urban and rural populations. Non-fatal injury surveillance *does not aim to capture all non-fatal injuries* however it can provide useful information on trends, and relative burden of different types and mechanisms of injury.

### **c. Data Collection**

The data on injuries presenting to emergency room (ER) in the sentinel hospitals are collected by trained nurses using a standardized surveillance form. Information on demographics, cause, intent and place of injury as well as the mode of transport, pre-hospital care and patient disposition was obtained through patient interviews and review of ER medical cards. The data were entered at the ER statistical units in the hospitals and transmitted to the Directorates of Health (DOH). DOH conducted preliminary analysis and transmitted the data to the project focal point at the MOH for final analysis. DOH shared the results of preliminary analysis with the reporting hospitals and other stakeholders.

For fatal injuries, data are collected by coroners using a similar standardized surveillance form. Forensic observation, police reports and interviews with witnesses are used to complete the form. The data are entered at the coroner office and transmitted to the DOH. DOH conducted preliminary analysis and transmitted the data to the project focal point at the MOH for final analysis .

The surveillance form used in coroner offices and ERs was prepared in English with the support of experts from the WHO and CDC. The form has been translated into Arabic and Kurdish. Data is entered into an electronic form (developed using the Epi-Info software) by trained technicians. The current form is provided as Annex 1.

The following variables are collected on the form:

- Health Directorate and Reporting Site
- Demographic information
- Date and time of injury
- Date and time of arrival at ER or CO
- Mode of transport to health facility or CO
- Death certificate number (CO data only)
- Mechanism of Injury
- Intention
- Place of injury
- Pre-hospital care (for ER only)

- Patient disposition (for ER only)
- Additional modules: detailed information on circumstances of injuries resulting from mines and ordnance.

The data are transferred to the project focal point at the Ministry of Health monthly (by e-mail as well as CD), where they are merged, consolidated, processed and sent to the CDC and the WHO for review.

#### **d. Data Quality and Completeness**

Designated focal points in ER and CO were trained to monitor the data collection process. These individuals are the first check to ensure accuracy and completeness of the data. They review the data daily before sending the forms for data entry.

Officials at the Operations Center of DOH and/or the MOH conducted monthly visits to monitor the process. During monthly visits, surveillance forms are compared to hospital and COS records. An external auditing team from the MOH Scientific Committee also organizes field visits to review and verify the record in each reporting site.

The injury surveillance system is a unit in the Operations Center Department; which is part of Operations Center and Emergency Medicine Directorate in the MOH.

Additionally, the data quality is reviewed during analysis by colleagues at the WHO and CDC to comprehensively check for duplicates, missing data, consistency and face validity of the findings.

#### **e. Ethical Consideration**

The surveillance system has been approved by the MOH. Throughout all phases, the privacy of the injured persons is kept secure and confidential even when the records are transferred to the MOH. The injured persons are kept informed that all the information provided are for the improvement of the health services and will not be shared with any other legal or judicial entities and will not be used against them in any way.

Sexual assault is not documented in order to preserve the privacy of the patient in the conservative Iraqi society. Data derived from the forensic medicine departments are treated with full confidentiality while handling and all the forms are kept protected.

#### **f. Dissemination and Use for Public Health Action**

The focal point at the MOH, responsible for the surveillance system, develops the annual report with the assistance of the WHO and CDC. The report is delivered to Presidency of the Council of Ministers, National Security Council, and other MOH Directorates including the Public Health Directorate and Non-Communicable Disease Control and Prevention Section of the Primary Health Care Department.

The following Ministries receive a copy of the report: Defense, Interior, Traffic Affair, Civil Defense, the Center of Health and Professional Safety, Labour, Electricity, Oil, Planning, Education, and Industry. The annual report is also disseminated to nongovernmental organizations.

The National Committee for Injury Prevention will use the data published in the report to enhance and redirect their preventive and control measures accordingly.

## 2.Overview of key findings \_non-fatal injury surveillance

### 2-1 overall number of injuries and victims by (D.O.H), 2019.

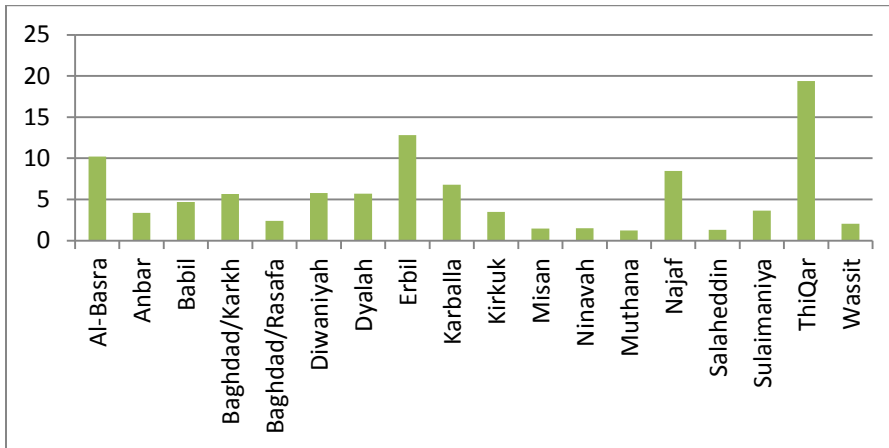
Table (2); number and percent of non-fatal injuries reported by directorates of health (D.O.H), 2019.

DOH	N	%
Al-Basra	9299	10.21
Anbar	3058	3.36
Babil	4288	4.71
Baghdad/Karkh	5163	5.67
Baghdad/Rasafa	2181	2.39
Diwaniyah	5265	5.78
Dyalah	5201	5.71
Erbil	11684	12.83
Karballa	6195	6.8
Kirkuk	3171	3.48
Misan	1317	1.45
Ninavah	1387	1.52
Muthana	1129	1.24
Najaf	7716	8.47
Salaheddin	1187	1.3
Sulaimaniya	3306	3.63
ThiQar	17676	19.4
Wassit	1878	2.06
Total	91101	100.00

The total number of non-fatal injuries reported in 2019 was (91.101), in 2019.

Data received from all directorates of health (D.O.H) except Dohuk D.O.H.

**Figure (1); percent of non-fatal injuries reported by directorates of health (D.O.H), 2019.**



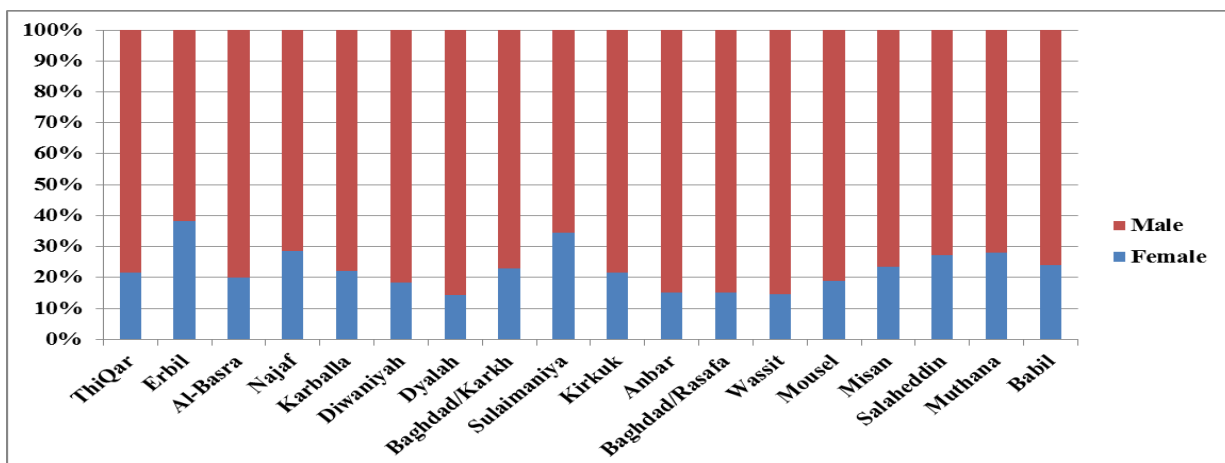
This figure shows that ThiQar reported the highest percent (19.4)%, then Erbil (12.83) % and Basrah(10.21)% , while Muthanaa reported the lowest percent (1.24) %.

**Table (3); number and percent of male and female of reported non-fatal injuries, 2019.**

DOH	Female %	Male %	Unknown %	Total %
ThiQar	4.18	15.22	0	19.42
Erbil	4.91	7.91	0	12.84
Al-Basra	2.02	8.19	0	10.21
Najaf	2.42	6.05	0	8.48
Karballa	1.49	5.3	0.001	6.81
Diwaniyah	1.06	4.72	0	5.79
Dyalah	0.81	4.89	0	5.72
Baghdad/Karkh	1.3	4.36	0	5.67
Sulaimaniya	1.25	2.37	0	3.63
Kirkuk	0.75	2.73	0.001	3.48
Anbar	0.51	2.02	0	3.36
Baghdad/Rasafa	0.36	2.03	0	2.4
Wassit	0.31	1.76	0	2.06
Ninavah	0.29	1.23	0	1.52
Misan	0.34	1.1	0	1.45
Salaheddin	0.36	0.95	0	1.3
Muthana	0.35	0.89	0	1.24
Babil	0.97	3.73	0	4.71
Total	23.67	76.28	0.002	100.00

This table shows the highest percent in total reported non-fatal injuries (76.28) % was among male.

**Figure (2); sex distribution of reported non-fatal injuries, 2019.**



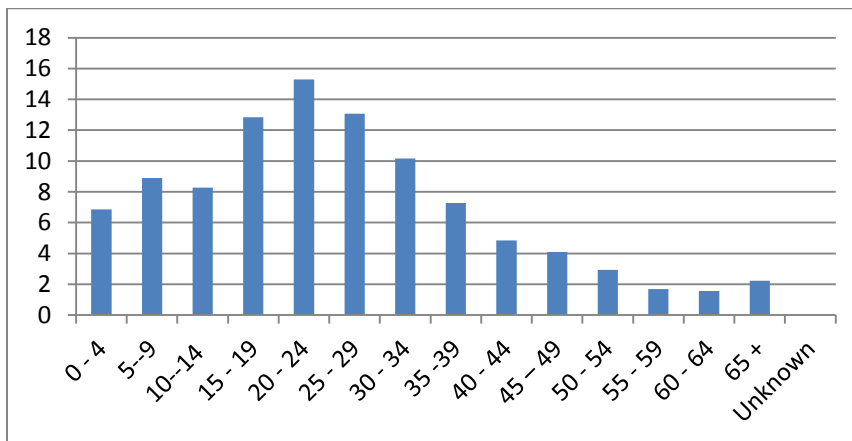
This figure shows highest percent of reported non-fatal injuries in 2019 was in male in all governorates as well as in total.

**Table (4); the percent of non-fatal injuries within each five years age group, 2019.**

Age Group	%
0 - 4	6.85
5 - 9	8.90
10 - 14	8.26
15 - 19	12.83
20 - 24	15.28
25 - 29	13.07
30 - 34	10.15
35 - 39	7.27
40 - 44	4.85
45 - 49	4.10
50 - 54	2.93
55 - 59	1.69
60 - 64	1.55
65 +	2.22
Unknown	0.03

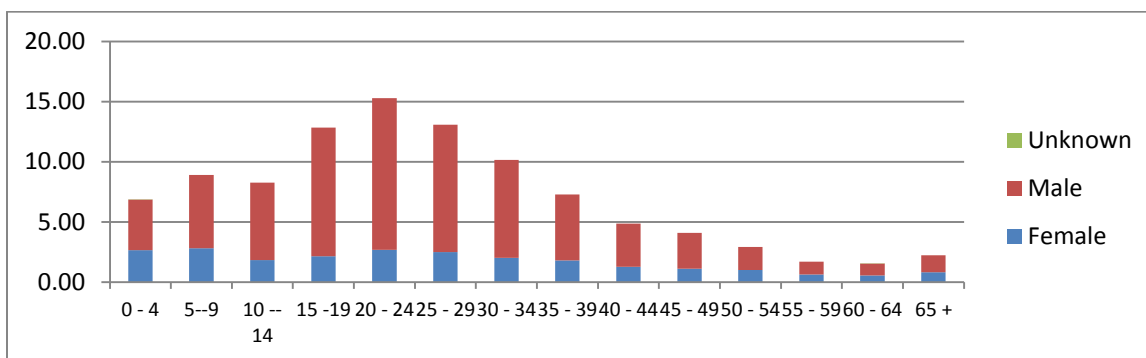
This table shows that non-fatal injuries affected all age groups ,but reproductive age (15 – 39) affected more than other age groups, older age groups (65+) regarded as one age group to simplify analysis

**Figure (3): age distribution of reported non-fatal injuries, 2019.**



This bar figure shows clearly the youth or reproductive age (15-39) represents more than half of all reported non-fatal injuries.

**Figure(4); age distribution of reported non-fatal injuries according to sex, 2019.**



This figure shows that non-fatal injuries in both male and female reported according to age group, it is clear that the number is increasing with age to reach peak at age group ( 20 -24 ). Reported non – fatal injuries in male are more than in female in all age groups, especially in age group (15 – 34) when male represents more than three – quarter of reported injuries.

Reported non – fatal injuries in male in age group (0 – 4) and age group (50 +) is still higher than in female, but the proportion is not as big as in other age groups.

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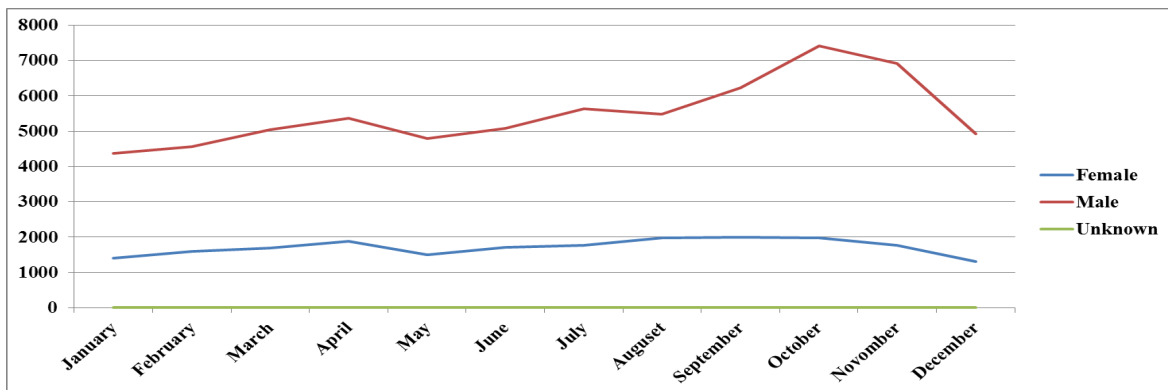


## 2-2 time trend

**Table (5); number and percent of non-fatal injuries according to months, 2019.**

Months	N	%
January	6193	6.8
February	6568	7.1
March	7108	7.8
April	7629	8.37
May	6659	7.31
June	7119	7.81
July	7748	8.5
August	7841	8.61
September	8634	9.48
October	9863	10.83
November	9287	10.19
December	6552	7.19
Total	91101	100

**Figure (5); time trend of non-fatal reported injuries, 2019.**



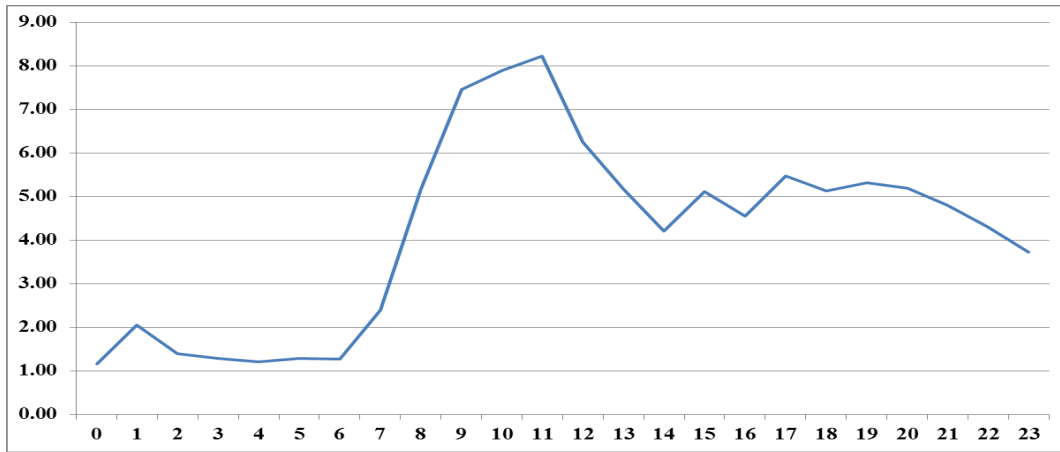
This figure shows that injuries reported in both male and female during all months. The lowest percent recorded during January, while the highest percent recorded during October, 2019.

**Table (6); number and percent of injuries reported according to time, 2019.**

Time of injury	N	%
0	2518	2.76
1	1597	1.75
2	1681	1.85
3	1226	1.35
4	1129	1.24
5	1098	1.21
6	1051	1.15
7	1347	1.48
8	2611	2.87
9	5267	5.78
10	7155	7.85
11	7792	8.55
12	6998	7.68
13	5237	5.75
14	4123	4.53
15	3768	4.14
16	4617	5.07
17	4353	4.78
18	4910	5.39
19	4631	5.08
20	5116	5.62
21	4497	4.94
22	4306	4.73
23	3984	4.37
Total	91101	100

This table shows non-fatal injuries according to international time(0-23) .Majority of Non-fatal injuries occurred during the period (8 am -14 pm).

**Figure (6); distribution of non-fatal injuries reported by day, 2019.**



This figure shows number of non- fatal injuries reported started to increase after 6 am (morning) to reach peak around mid-day ,then began to decrease after 14 pm (afternoon), then number became more obviously low till six o'clock of next morning , when started to increase again.

## **2-3 distribution of injuries by intention**

The following section presented injuries by intention of injury .

The intention of injury classified into;

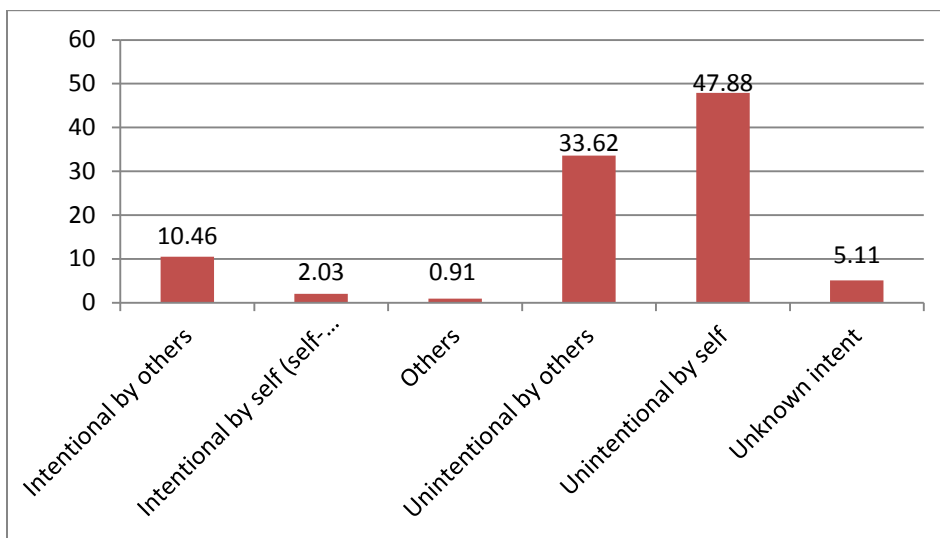
- Intentional by others
- Intentional by self (self-harm)
- Others
- Unintentional by others
- Unintentional by self
- Unknown intent.

**Table (7) number and percent of injuries by intention of non – fatal injuries, 2019.**

Injuries by Intention	N	%
Intentional by others	9526	10.46
Intentional by self (self-harm)	1847	2.03
Others	828	0.91
Unintentional by others	30626	33.62
Unintentional by self	43621	47.88
Unknown intent	4653	5.11
Total	91101	100

This table shows that according to intention, majority of non-fatal injuries were unintentional, followed by intentional then unknown intent.

**Figure (7); percent of injuries by intention of reported non – fatal injuries, 2019.**



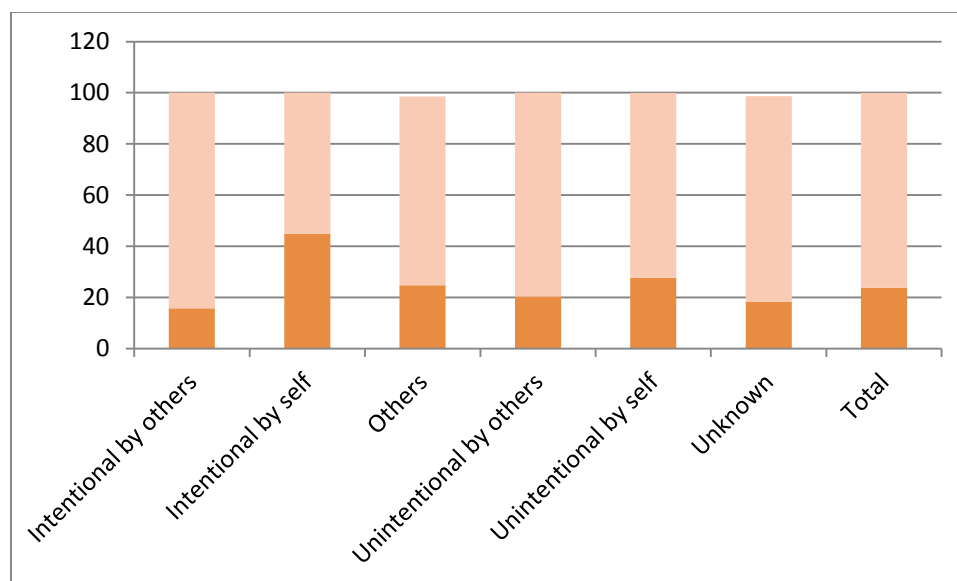
This figure shows that an un-intentional injuries either by self or by others cause the greatest proportion (more than 81% together) of all non- fatal injuries in 2019 ,and intentional injuries wither by self or by others represents (about 12% together), while the proportion of unknown intentional injuries represents (about 5%).

**Table (8); number and percent of injuries reported according to sex, 2019.**

Intention	Female		Male		total	
	N	%	N	%	N	%
Intentional by others	1495	15.7	8030	84.3	9526	10.46
Intentional by self	809	44.9	1083	55.1	1847	2.03
Others	206	24.8	611	73.7	828	0.91
Unintentional by others	6230	20.3	24391	79.7	30626	33.62
Unintentional by self	12055	27.6	31554	72.3	34621	47.88
Unknown	854	18.3	3743	80.4	4653	5.11
<b>Total</b>	<b>21579</b>	<b>23.68</b>	<b>69500</b>	<b>76.28</b>	<b>91101</b>	<b>100</b>

This table shows that the number and percent of injuries among male represented about three-quarters of total reported injuries. The percent in male is higher than in female in all types of injuries. To make table more obvious, unknown gender was discarded ,because there was very few number of injuries reported as unknown gender.

**Figure (8); number and percent of injuries reported according to sex, 2019.**



This figure shows that male to female ratio is greater in male ,only in intentional by self (self-harm),male to female ratio is nearly equal.

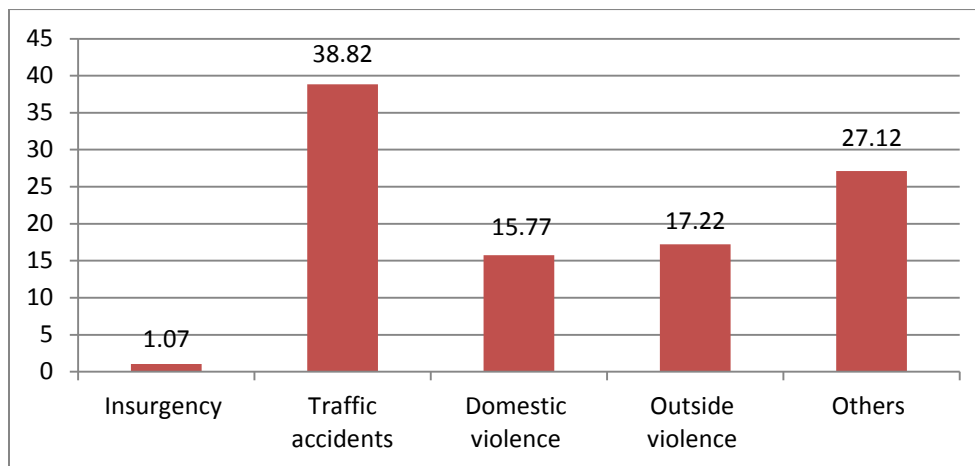
## 2-4 distribution of injuries by mechanism

The following section presented injuries by mechanism of injury .The mechanism of injury reflects the primary cause of non-fatal injury as classified by health care provider, while circumstances of injury reveals how was the injury inflicted.

**Table (9); number and percent of non-fatal injuries according to circumstances of injury, 2019.**

<b>Circumstances of injury</b>	<b>N</b>	<b>%</b>
<b>Insurgency</b>	<b>979</b>	<b>1.07</b>
<b>Traffic accidents</b>	<b>35361</b>	<b>38.82</b>
<b>Domestic violence</b>	<b>14367</b>	<b>15.77</b>
<b>Outside violence</b>	<b>15685</b>	<b>17.22</b>
<b>Others</b>	<b>24709</b>	<b>27.12</b>
<b>Total</b>	<b>91101</b>	<b>100.00</b>

**Figure (9); percent of non-fatal injuries according to circumstances ,2019.**

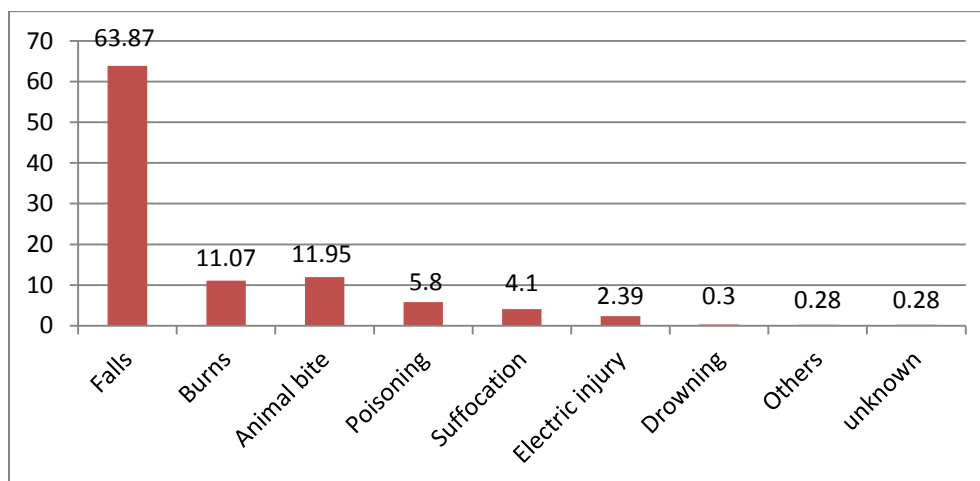


This figure shows that traffic was the main cause among non-fatal injuries, represented (38,82)% followed by others (injury other than traffic like falls, burns, animal bites..) which represented (27.12) %,then Outside violence which represented (17.22) %.

**Table (10); number and percent of unintentional (other than traffic...), injuries among all non-fatal injuries according to mechanism, 2019.**

<b>Unintentional-other injuries</b>	<b>N</b>	<b>%</b>
<b>Falls</b>	<b>15774</b>	<b>63.87</b>
<b>Burns</b>	<b>2734</b>	<b>11.07</b>
<b>Animal bite</b>	<b>2952</b>	<b>11.95</b>
<b>Poisoning</b>	<b>1433</b>	<b>5.8</b>
<b>Suffocation</b>	<b>1012</b>	<b>4.1</b>
<b>Electric injury</b>	<b>590</b>	<b>2.39</b>
<b>Drowning</b>	<b>74</b>	<b>0.3</b>
<b>Others</b>	<b>70</b>	<b>0.28</b>
<b>unknown</b>	<b>70</b>	<b>0.28</b>
<b>Total</b>	<b>24709</b>	<b>100.00</b>

**Figure (10); percent of unintentional (other than traffic...), injuries among all non-fatal injuries according to mechanism, 2019.**



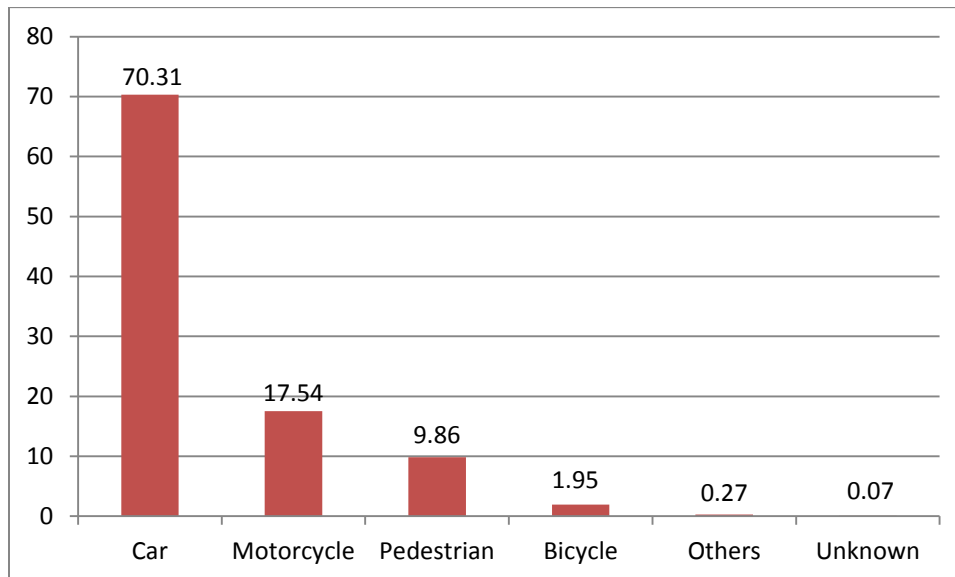
This figure shows that falls was the main cause among other (than traffic) non-fatal injuries, represented (63.87)% followed by animal bites which represented (11.95)%, then burns which represented (11.07) %.

**Table (11); number and percent by mechanism among non-fatal nonfatal traffic,2019**

<b>Traffic injuries</b>	<b>N</b>	<b>%</b>
<b>Car</b>	<b>24864</b>	<b>70.31</b>
<b>Motorcycle</b>	<b>6201</b>	<b>17.54</b>
<b>Pedestrian</b>	<b>3487</b>	<b>9.86</b>
<b>Bicycle</b>	<b>688</b>	<b>1.95</b>
<b>Others</b>	<b>96</b>	<b>0.27</b>
<b>Unknown</b>	<b>25</b>	<b>0.07</b>
<b>Total</b>	<b>35361</b>	<b>100.00</b>

This table shows number and percent of traffic injuries classified wither (car, motorcycle bicycle ...) undergo to an accident.

**Figure (11); percent of injuries by mechanism among nonfatal- traffic injuries, 2019.**



This figure shows that the main cause related to non-fatal road traffic injuries was car accidents (70.31) % followed by motorcycles (17.54) %, then pedestrians (9.86) %.



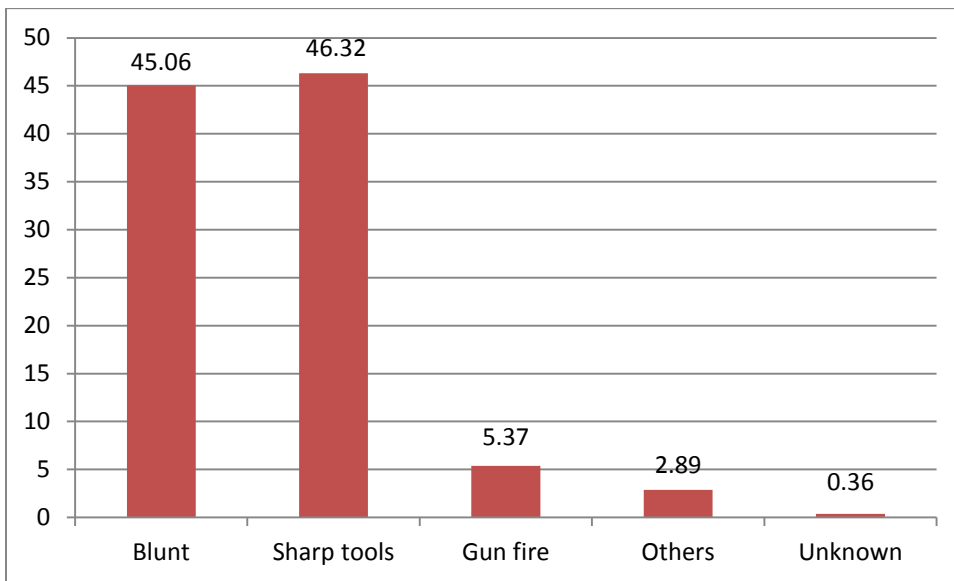
**Table (12); number and percent of outside violence injuries among nonfatal injuries,2019.**

<b>Outside Violence</b>	<b>N</b>	<b>%</b>
<b>Blunt</b>	<b>7067</b>	<b>45.06</b>
<b>Sharp tools</b>	<b>7265</b>	<b>46.32</b>
<b>Gun fire</b>	<b>842</b>	<b>5.37</b>
<b>Others</b>	<b>454</b>	<b>2.89</b>
<b>Unknown</b>	<b>57</b>	<b>0.36</b>
<b>Total</b>	<b>15685</b>	<b>100</b>

This table shows number and percent of outside violence injuries according to cause.

Remember that outside violence injuries represented (17, 22) % from total non-fatal injuries as mentioned in table(9).

**Figure (12) percent of outside violence injuries among nonfatal injury, 2019.**



This figure shows that sharp tools and blunt injuries represented the two main causes in outside non-fatal injuries ,followed by gunfire.

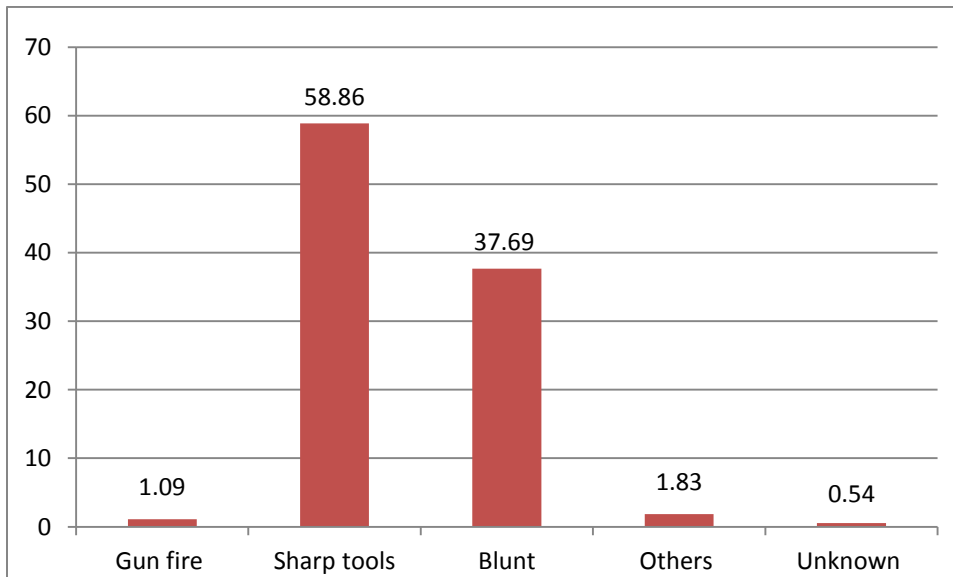
**Table (13); number and percent of domestic violence among non-fatal injuries, 2019.**

<b>Domestic violence</b>	<b>N</b>	<b>%</b>
<b>Gun fire</b>	<b>156</b>	<b>1.09</b>
<b>Sharp tools</b>	<b>8456</b>	<b>58.86</b>
<b>Blunt</b>	<b>5415</b>	<b>37.69</b>
<b>Others</b>	<b>263</b>	<b>1.83</b>
<b>Unknown</b>	<b>77</b>	<b>0.54</b>
<b>Total</b>	<b>14367</b>	<b>100</b>

This table shows number and percent of domestic violence injuries according to cause.

Remember that domestic violence injuries represented (15, 77) % from total non-fatal injuries as mentioned in table(9).

**Figure (13) ; percent of domestic violence among all non- fatal injuries, 2019**



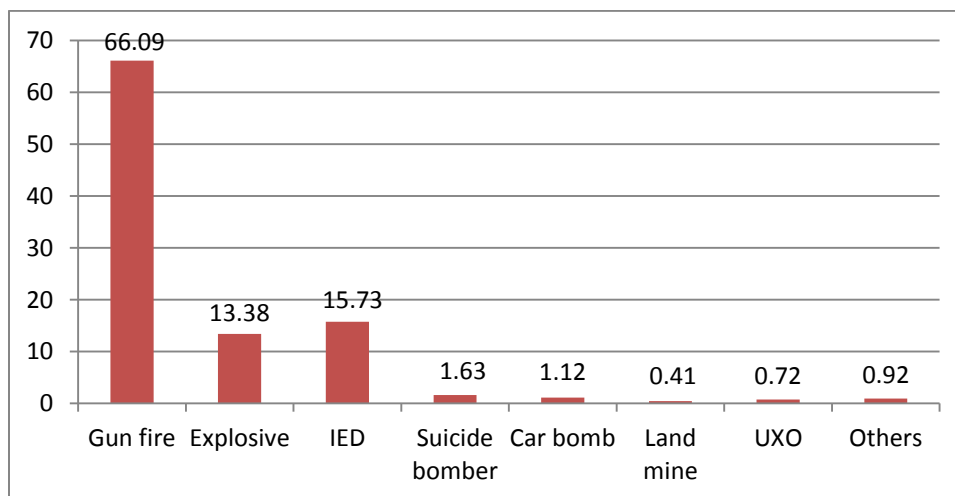
This figure shows that ,as in outside violence, sharp tools and blunt injuries represented the main causes, while gun fire represented only (1.09)% of domestic non-fatal injuries.

**Table (14); number and percent of insurgency activities according to mechanism of injury among all non-fatal injuries, 2019.**

<b>Insurgency activity</b>	<b>N</b>	<b>%</b>
<b>Gun fire</b>	<b>647</b>	<b>66.09</b>
<b>Explosive</b>	<b>131</b>	<b>13.38</b>
<b>IED</b>	<b>154</b>	<b>15.73</b>
<b>Suicide bomber</b>	<b>16</b>	<b>1.63</b>
<b>Car bomb</b>	<b>11</b>	<b>1.12</b>
<b>Land mine</b>	<b>4</b>	<b>0.41</b>
<b>UXO</b>	<b>7</b>	<b>0.72</b>
<b>Others</b>	<b>9</b>	<b>0.92</b>
<b>Total</b>	<b>979</b>	<b>100.00</b>

This table shows number and percent of Insurgency activities according to cause. Remember that insurgency injuries represented (1, 07) % from total non-fatal injuries as mentioned in table (9).

**Figure (14); percent of insurgency activity according to mechanism of injury among all non-fatal injuries, 2019.**



This figure shows that gun fire represented the main cause of non-fatal insurgency activities (66.09) %, then improvised explosive device (IED) (15.73) % and explosive(13.38) % .

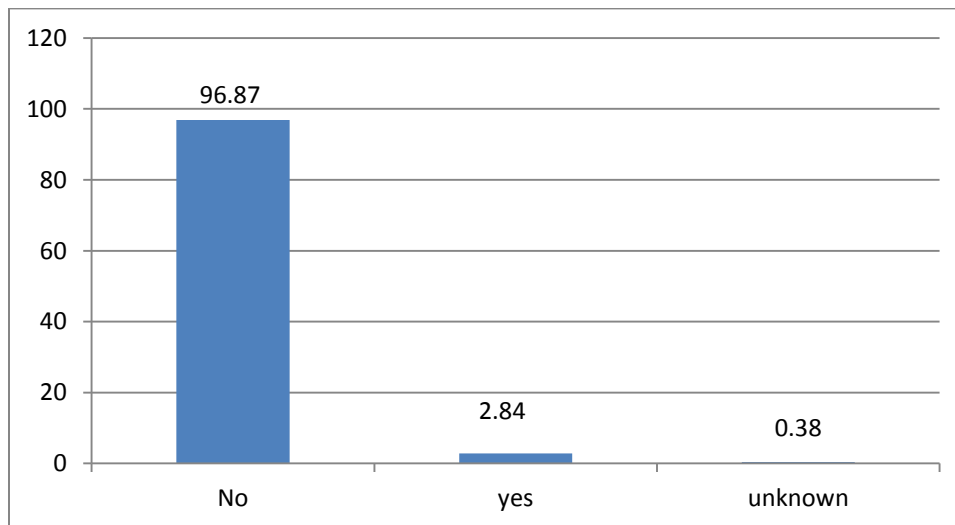
## 2 – 5 mass injury events

In this section a mass injury event is defined as an event that causes 5 or more people injured in the accident.

**Table (15); number and percent of injuries resulting from mass injury event among reported non-fatal injuries, 2019.**

If mass injury event?	N	%
No	88171	96,87
Yes	2585	2.84
Unknown	345	0,38
Total	91101	100

**Figure (15); percent of injuries resulting from a mass injury event among reported non-fatal injuries, 2019.**



This figure shows the proportion of injuries resulting from a mass casualty event among all reported non-fatal injuries.

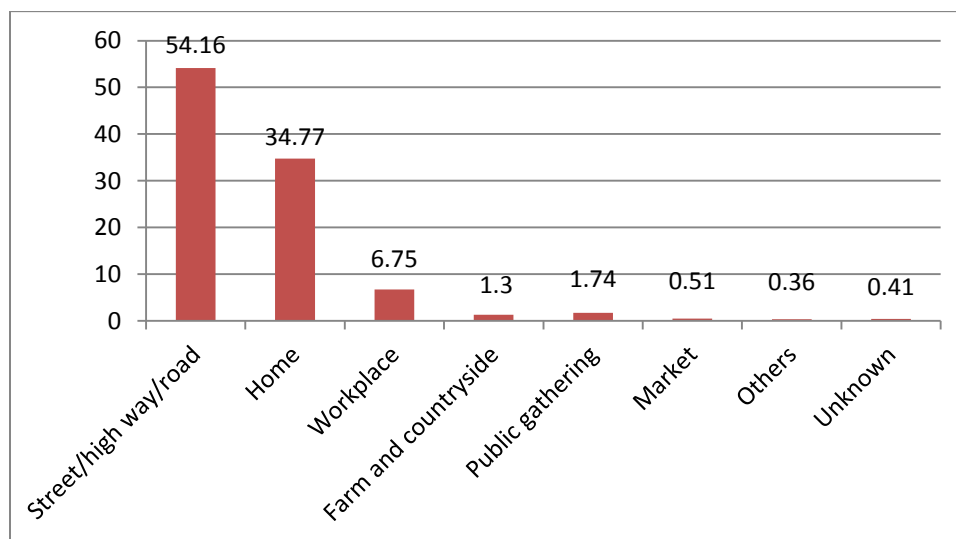
Only (2.84) % of injuries resulted from mass casualty events.

## 2 – 6 Distribution according to place of injury

Table (16) number and percent of non-fatal injuries according to place of occurrence, 2019.

Place of occurrence	N	%
Street/high way/road	49340	54.16
Home	31677	34.77
Workplace	6153	6.75
Farm and countryside	1181	1.3
Public gathering	1583	1.74
Market	463	0.51
Others	326	0.36
Unknown	378	0.41
<b>Total</b>	<b>91101</b>	<b>100.00</b>

Figure (16); percent of non-fatal injuries according to place,2019.



This figure shows that more than half of injuries (54.16) % occurred in street /highway/road, while injuries occurred at home represented (34.77%).

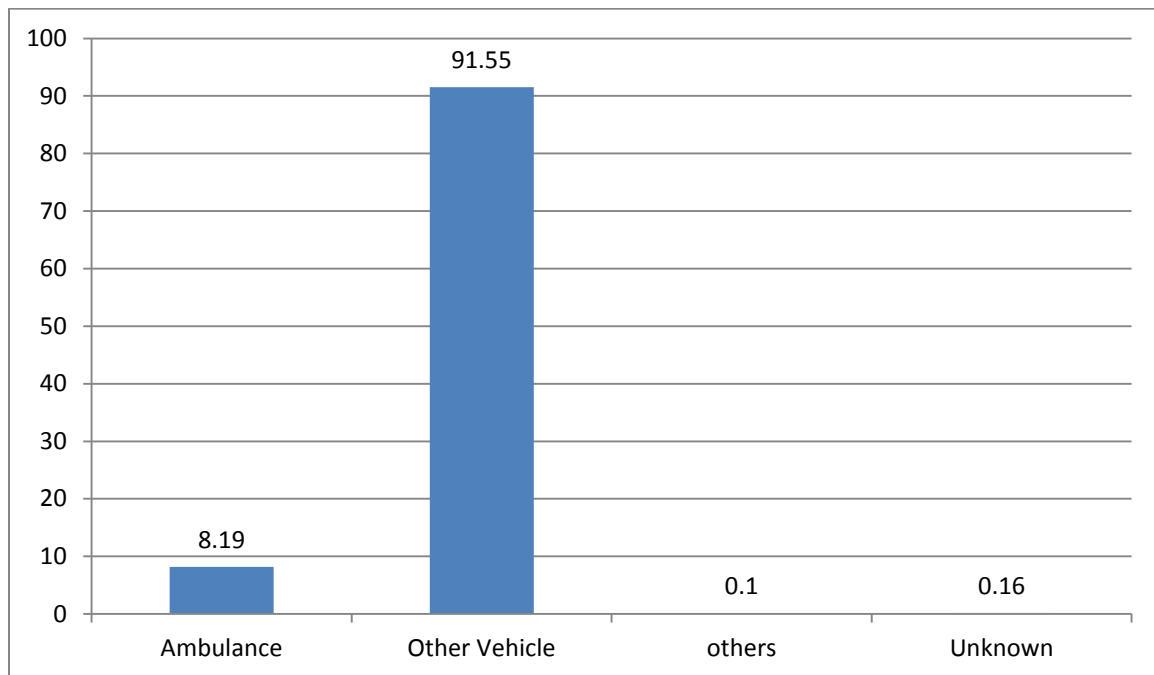
The injuries occurred in workplace came third and represented (6.75) % of total injuries reported during 2019.

## 2 – 7 pre- hospital care and disposition

Table (17); number and percent of reported non-fatal injuries received from (D.O.H) according to mode of arrival, 2019.

Mode of arrival	N	%
Ambulance	7465	8.19
Other Vehicle	83400	91.55
others	91	0.1
Unknown	145	0.16
total	91101	100.00

Figure (17); percent of reported non-fatal injuries received from (D.O.H) according to mode of arrival, 2019.



This figure shows that only ( 8,19)% of non-fatal injuries arrived to hospital by an ambulance ,while (91,55)% arrived by other vehicles.

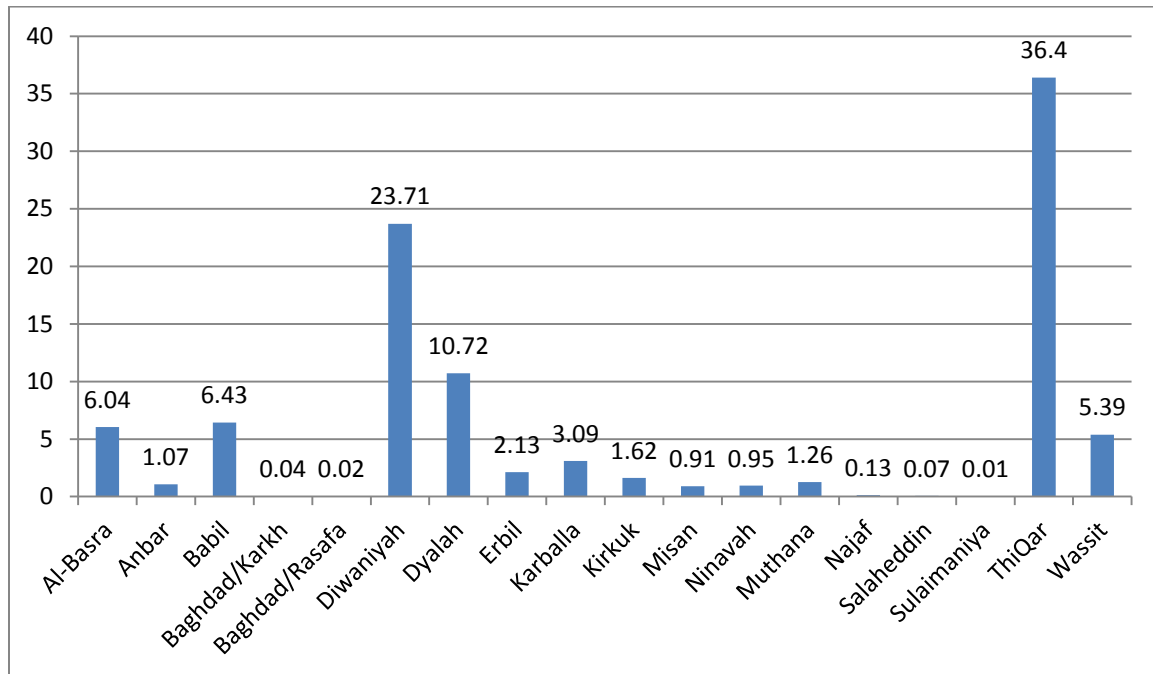
**Table(18);number and percent of injuries arrived by ambulance as reported by (DOH),2019.**

D.O.H	N	%
Al-Basra	455	6.04
Anbar	80	1.07
Babil	480	6.43
Baghdad/Karkh	3	0.04
Baghdad/Rasafa	2	0.02
Diwaniyah	1770	23.71
Dyalah	800	10.72
Erbil	159	2.13
Karbala	231	3.09
Kirkuk	121	1.62
Misan	68	0.91
Ninavah	71	0.95
Muthana	94	1.26
Najaf	10	0.13
Salaheddin	5	0.07
Sulaimaniya	1	0.01
ThiQar	2717	36.4
Wassit	402	5.39
Total	7465	100

this figure shows number and percent of non-fatal injuries transferred to hospital by ambulance. The total number (7456) ,represented only (8) % of total non-fatal injuries .

In some D.O.H like (Baghdad-Rasafa ,Baghdad –Karkh, Salahddin and Sulaimaniya) the number of transferring injured cases by ambulance was very small.

**Figure (18); percent of non-fatal injuries arrived by ambulance according to (D.O.H), 2019.**



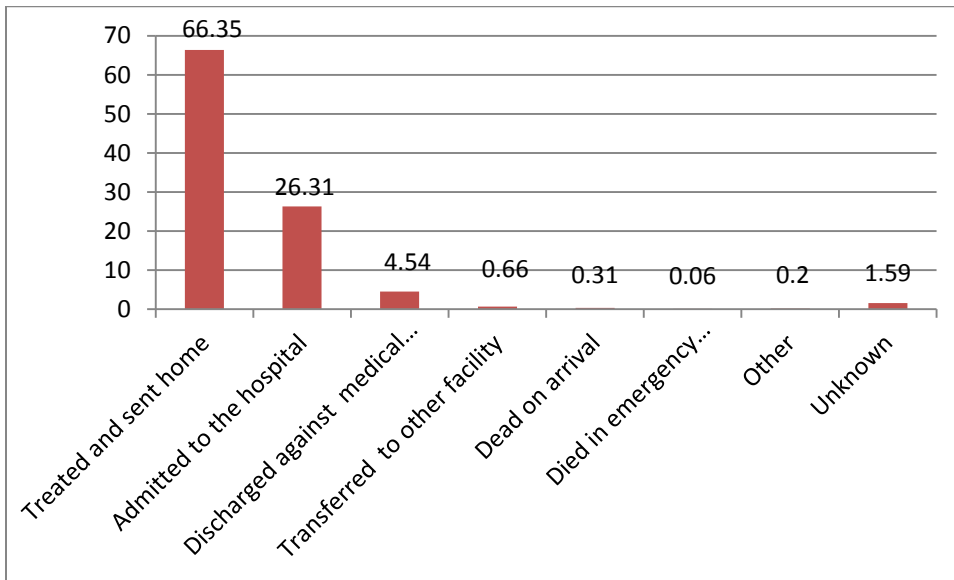
This figure shows that the highest percent of arriving to hospital by an ambulance was in ThiQar (36.4)%, then Diwaniyah (23.71) %, and Dyalah (10.72) %.

**Table (19); number and percent of initial disposition of reported non-fatal injuries, 2019.**

Initial patient disposition in emergency department	N	%
Treated and sent home	60442	66.35
Admitted to the hospital	23965	26.31
Discharged against medical advice	4132	4.54
Transferred to other facility	604	0.66
Dead on arrival	278	0.31
Died in emergency department	51	0.06
Other	178	0.2
Unknown	1451	1.59
Total	91101	100.00



**Figure (19); percent of initial disposition of reported non-fatal injuries, 2019.**



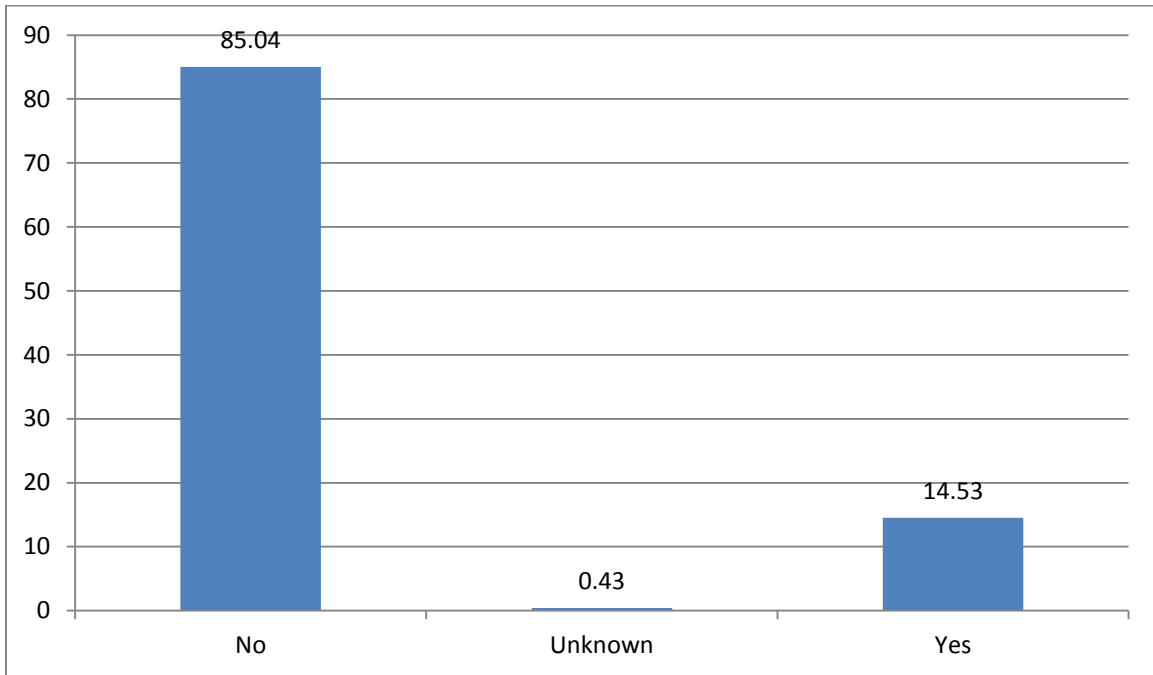
This figure shows that majority of non-fatal injuries was treated and discharged (66,35)%,while (26,31)% were admitted to hospital and (4,54)% were left hospital against medical advice.

**Table (20); number and percent of non-fatal injuries got medical care before emergency department, 2019**

If patient got medical care before ER ?	N	%
No	77471	85.04
Unknown	393	0.43
Yes	13237	14.53
total	91101	100

This table shows that only (14.53) % of the patients did get medical care before reaching to emergency department in hospitals. Majority (85.04) % of non-fatal injuries got no medical care before reaching ER in hospitals.

**Figure (20); percent of non-fatal injuries got medical care before emergency department , 2019.**



This figure shows that less than 15% of non-fatal injuries got medical care before reaching to emergency departments of hospitals .

### 3- Overview of key findings - fatal injury surveillance

#### 3 -1 Overall numbers of fatal injuries, demographics

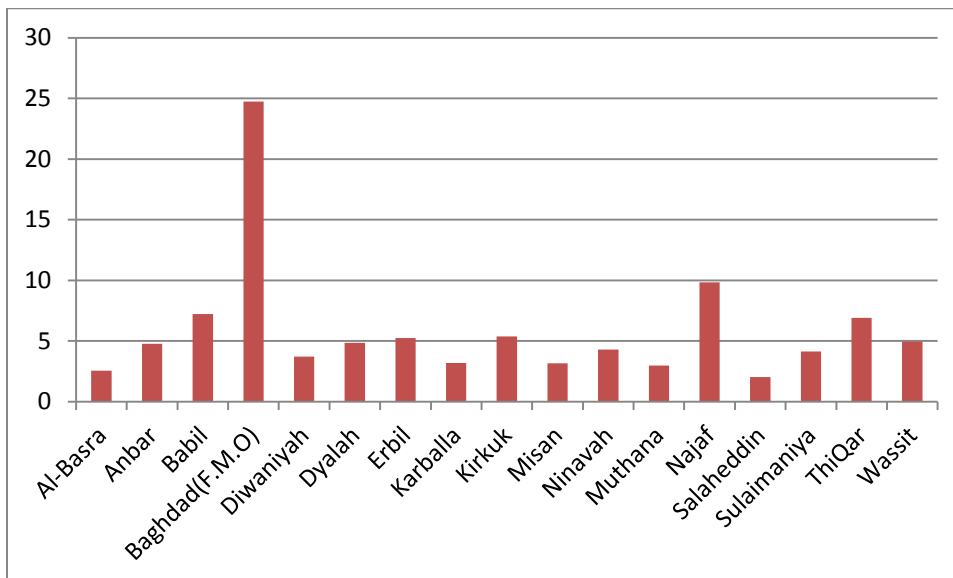
Table (21); number and percent of fatal injuries by D.O.H.,2019.

D.O.H	N	%
Al-Basra	302	2.57
Anbar	559	4.76
Babil	849	7.22
Baghdad(F.M.O)	2907	24.73
Diwaniyah	438	3.73
Dyalah	569	4.84
Erbil	616	5.24
Karballa	375	3.19
Kirkuk	633	5.39
Misan	373	3.17
Ninavah	505	4.3
Muthana	349	2.97
Najaf	1158	9.85
Salaheddin	239	2.03
Sulaimaniya	487	4.14
ThiQar	813	6.92
Wassit	582	4.95
total	11754	100

This table presents number and proportion of fatal injuries by D.O.H. The total number of fatal injuries reported was (11754). These numbers are proportions, not rates, because it is not represent the difference in total population in governorates.

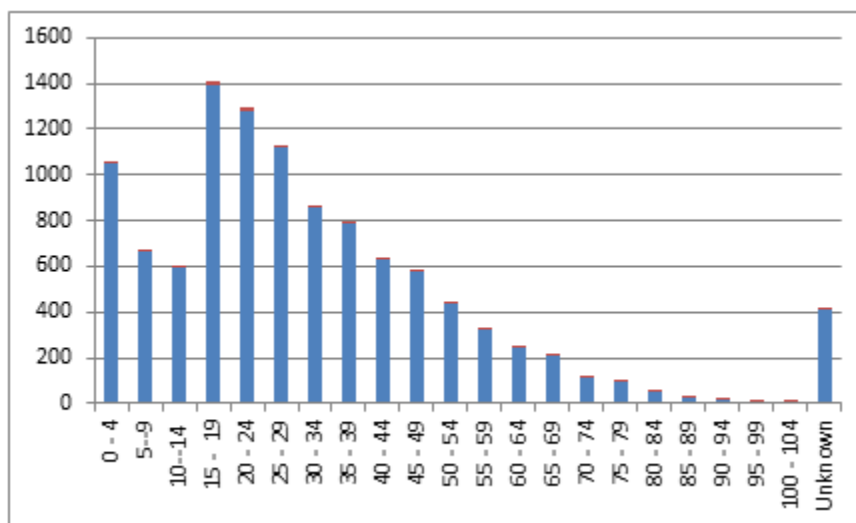
Dohuk Health Directorate did not send data.

**Figure (21):percent of fatal injuries according to D.O.H,2019.**



This figure shows that percent of fatal injuries as reported by forensic medicine sections in D.O.H. The highest percent (24, 73) % was reported in Baghdad Forensic Medicine Office, then Najaf (9.85)% and Babil (7.22) %.

**Figure (22); age distribution of fatal injuries, 2019.**



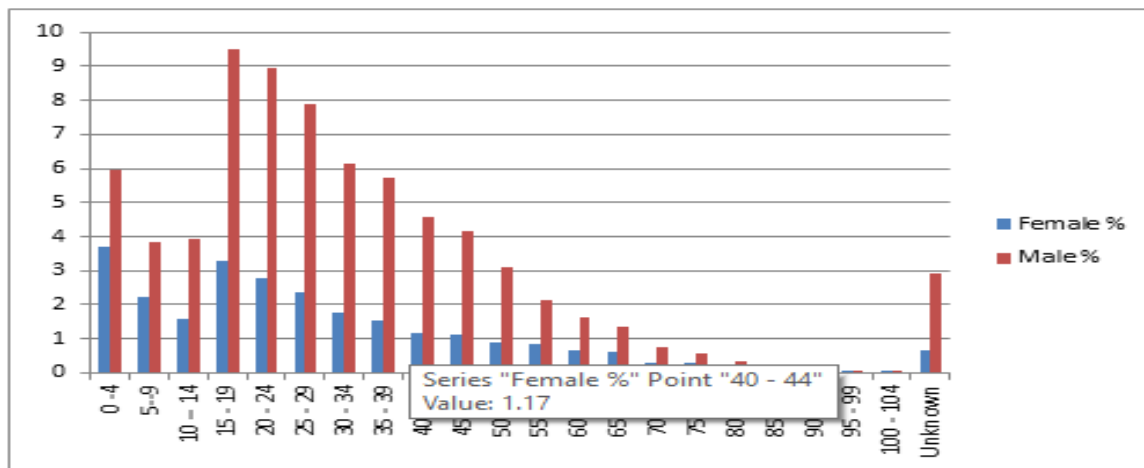
This figure shows that the most common age group affected due to fatal injuries was (15-29).

There is important percent (about 10 %) in children (0-4) years. The unknown age percent is bigger if we compare with non-fatal injuries in 2019..

**Table (22); age and sex distribution of fatal injuries,2019.**

<b>Age group</b>	<b>Female %</b>	<b>Male %</b>
<b>0 -4</b>	<b>3.7</b>	<b>5.94</b>
<b>5--9</b>	<b>2.23</b>	<b>3.86</b>
<b>10 -- 14</b>	<b>1.57</b>	<b>3.93</b>
<b>15 - 19</b>	<b>3.29</b>	<b>9.5</b>
<b>20 - 24</b>	<b>2.79</b>	<b>8.96</b>
<b>25 - 29</b>	<b>2.36</b>	<b>7.88</b>
<b>30 - 34</b>	<b>1.78</b>	<b>6.12</b>
<b>35 - 39</b>	<b>1.53</b>	<b>5.72</b>
<b>40 - 44</b>	<b>1.17</b>	<b>4.58</b>
<b>45 - 49</b>	<b>1.13</b>	<b>4.16</b>
<b>50 - 54</b>	<b>0.89</b>	<b>3.09</b>
<b>55 - 59</b>	<b>0.85</b>	<b>2.15</b>
<b>60 - 64</b>	<b>0.64</b>	<b>1.61</b>
<b>65 - 69</b>	<b>0.62</b>	<b>1.33</b>
<b>70 - 74</b>	<b>0.28</b>	<b>0.76</b>
<b>75 - 79</b>	<b>0.3</b>	<b>0.56</b>
<b>80 - 84</b>	<b>0.16</b>	<b>0.32</b>
<b>85 - 89</b>	<b>0.07</b>	<b>0.15</b>
<b>90 - 94</b>	<b>0.03</b>	<b>0.11</b>
<b>95 - 99</b>	<b>0.02</b>	<b>0.04</b>
<b>100 - 104</b>	<b>0.02</b>	<b>0.03</b>
<b>Unknown</b>	<b>0.68</b>	<b>2.91</b>

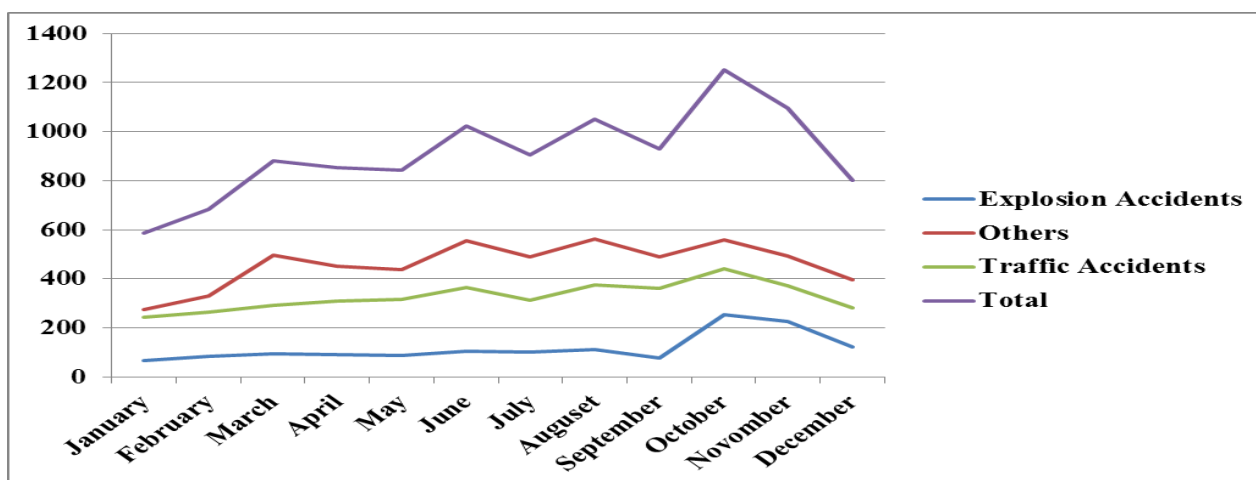
**Figure (23); age and sex distribution of fatal injuries, 2019.**



This figure shows that as with non-fatal injuries males represented a greater proportion of fatal injuries in every age group. This proportion is greater especially in age group (15-39) year.

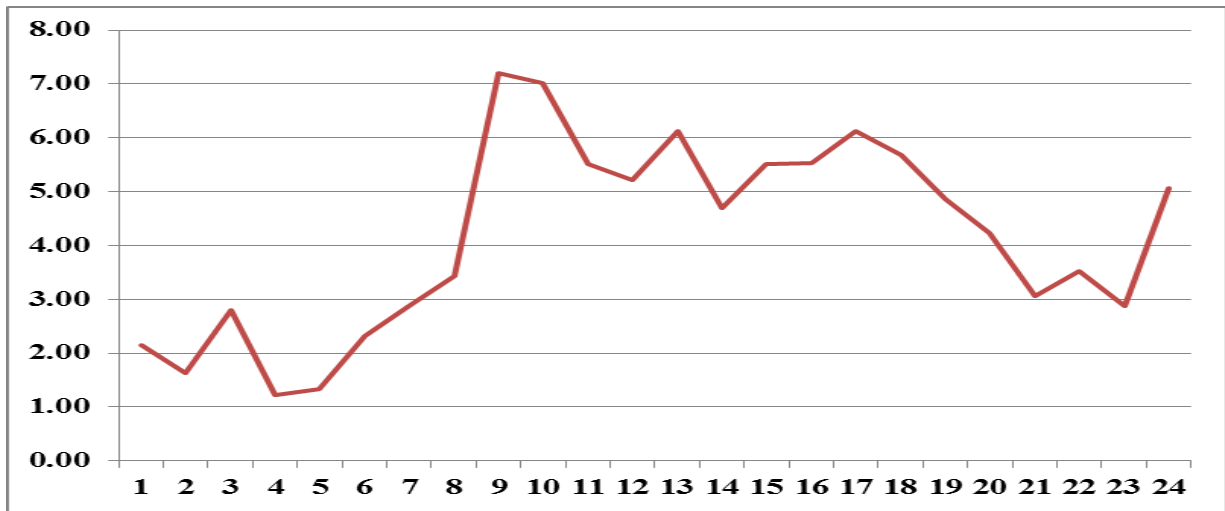
### 3-2 time trend

**Figure (24); percent of fatal injuries according to month, 2019.**



This figure shows that fatal traffic and unintentional – other injuries recorded in all months. Explosion accidents had a peak in October.

**Figure (25); percent of fatal injuries according to time of injury, 2019.**



This figure shows the number of fatal injuries became increasing from 8 o'clock, reached peak at (10-12) o'clock in the morning.

### **3 – 3 Distribution of fatal injuries by intention**

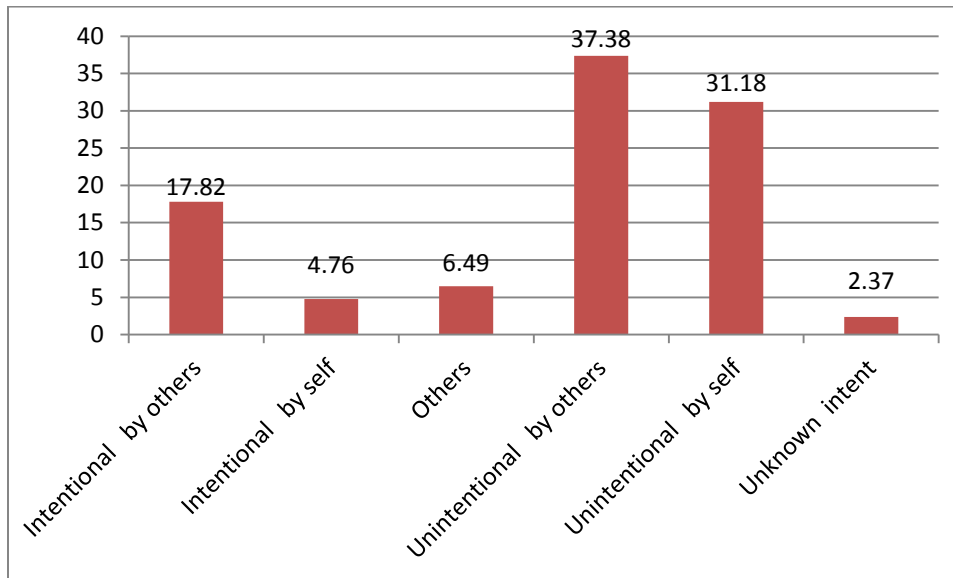
Injuries are classified into six categories according to intention

- |                            |                                    |
|----------------------------|------------------------------------|
| 1. unintentional by others | 4. intentional by others           |
| 2. unintentional by self   | 5. intentional by self (self-harm) |
| 3. others                  | 6. unknown intention               |

**Table (23); number and percent of fatal injuries by intention, 2019.**

Intention	N	%
Intentional by others	2094	17.82
Intentional by self	560	4.76
Others	763	6.49
Unintentional by others	4394	37.38
Unintentional by self	3665	31.18
Unknown intent	278	2.37
Total	11754	100

**Figure (26); percent of fatal injuries by intention, 2019.**



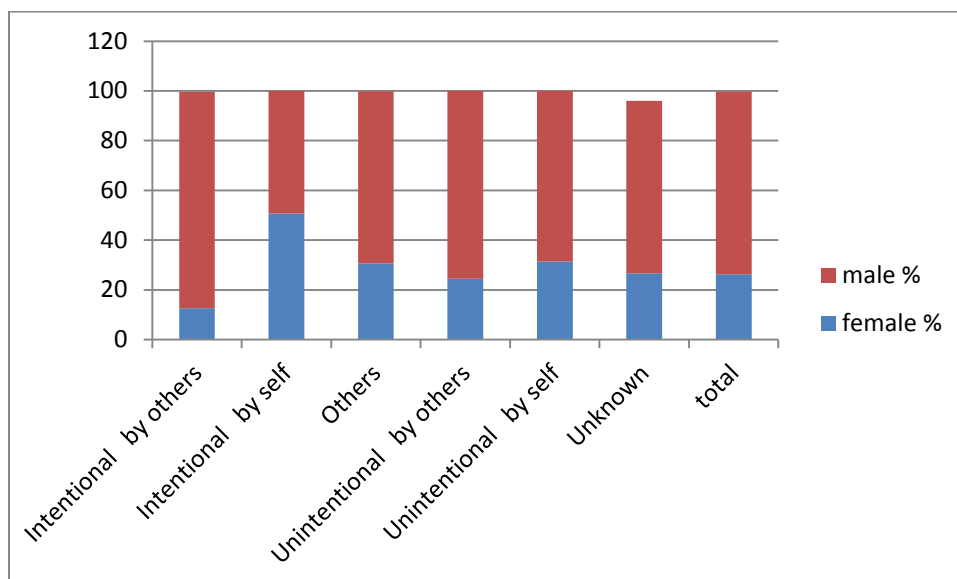
This figure shows unintentional by other injuries (37.38) % comes first, followed by unintentional by self (31.18) % then intentional by others (17.82) %. according to intention.

**Table (24); proportion of female and male among fatal injuries by intent, 2019.**

Circumstances category	Female		male		unknown	
	N	%	N	%	N	%
Intentional by others	264	12.61	1820	87	10	0.48
Intentional by self	284	50.71	276	49.29	0	0
Others	234	30.67	528	69.2	1	0.13
Unintentional by others	1077	24.51	3317	75.49	0	0
Unintentional by self	1149	31.35	2515	68.62	1	0.03
Unknown	74	26.62	193	69.42	11	3.96
total	3082	26.22	8649	73.58	23	0.2



**Figure; (27) sex distribution among fatal injuries according to intention, 2019.**



This figure shows that males represented high proportion in all categories with exception of intentional by self( self-harm) when Female was higher than male.

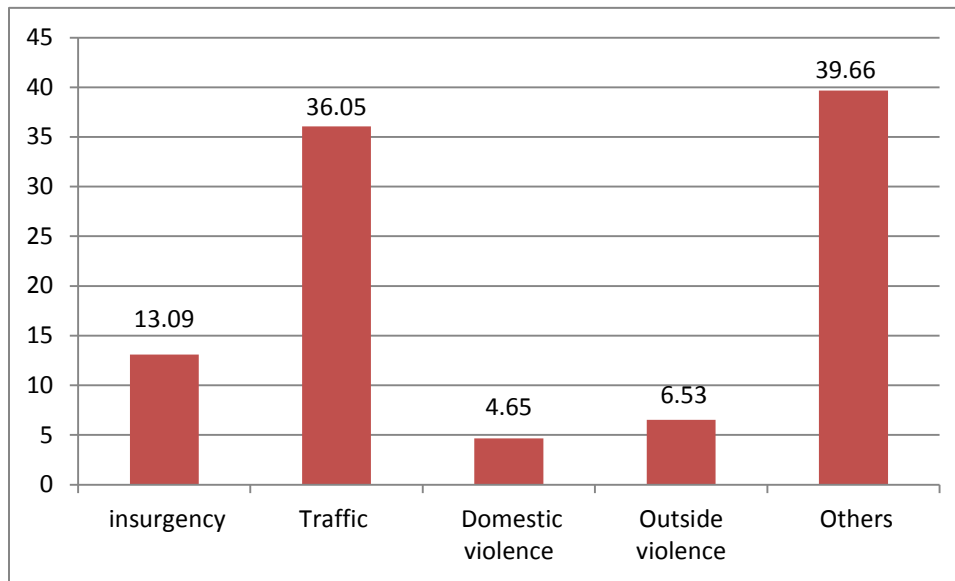
### 3-4 Distribution of fatal injuries by mechanism

The following section presented injuries by mechanism of injury. The mechanism of injury reflects the primary cause of fatal injury as classified by health care provider (for non-fatal injury) or by a corner (for fatal injury), while circumstances of injury reveals how was the injury inflicted.

**Table (25); number and percent of fatal injuries according circumstances, 2019**

circumstances	N	%
insurgency	1428	13.09
Traffic	3930	36.05
Domestic violence	507	4.65
Outside violence	712	6.53
Others	4324	39.66
Total	10901	100

**Figure (28); number and percent of fatal injuries according circumstances, 2019**

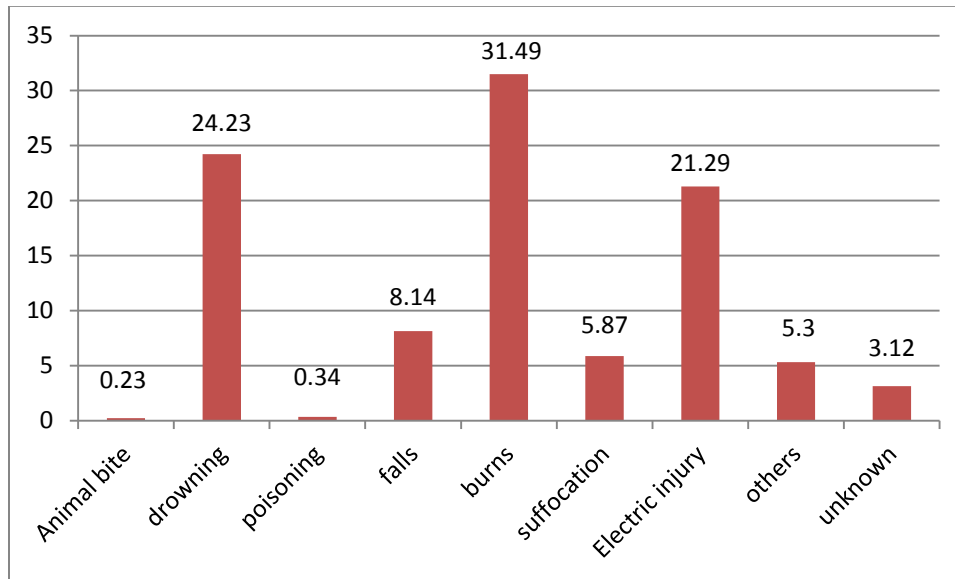


This figure shows that others injuries (injuries other than traffic) represents the main cause of fatal injuries, followed by traffic injuries, then insurgency. Traffic injuries alone represents (36.05) % from total fatal injuries.

**Table (26); number and percent of fatal-injuries according to primary cause of fatal injury other than traffic, 2019.**

<b>Causes(other than traffic)</b>	<b>N</b>	<b>%</b>
<b>Animal bite</b>	<b>10</b>	<b>0.23</b>
<b>drowning</b>	<b>1048</b>	<b>24.23</b>
<b>poisoning</b>	<b>15</b>	<b>0.34</b>
<b>falls</b>	<b>352</b>	<b>8.14</b>
<b>burns</b>	<b>1362</b>	<b>31.49</b>
<b>suffocation</b>	<b>254</b>	<b>5.87</b>
<b>Electric injury</b>	<b>921</b>	<b>21.29</b>
<b>others</b>	<b>227</b>	<b>5.3</b>
<b>unknown</b>	<b>135</b>	<b>3.12</b>
<b>total</b>	<b>4324</b>	<b>100</b>

**Figure (29); percent of fatal-injuries according to primary cause of fatal injury (other than traffic, 2019.**

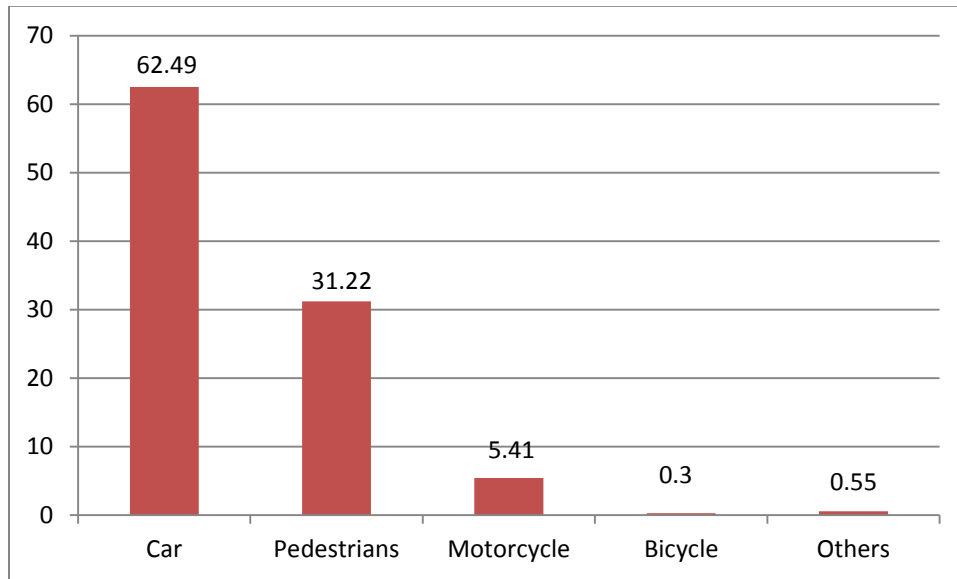


This figure shows that burns came first (31.49) %, followed by drowning (24.23) %, then electric injury (21.29) % .

**Table (27); number and percent of traffic injuries according to mechanism of injury among fatal- injuries,2019.**

Unintentional -Traffic Injuries	N	%
Car	2426	62.49
Pedestrians	1227	31.22
Motorcycle	213	5.41
Bicycle	12	0.3
Others	22	0.55
Total	3930	100

**Figure (30); percent of traffic injuries according to mechanism of injury among fatal-injuries,2019.**

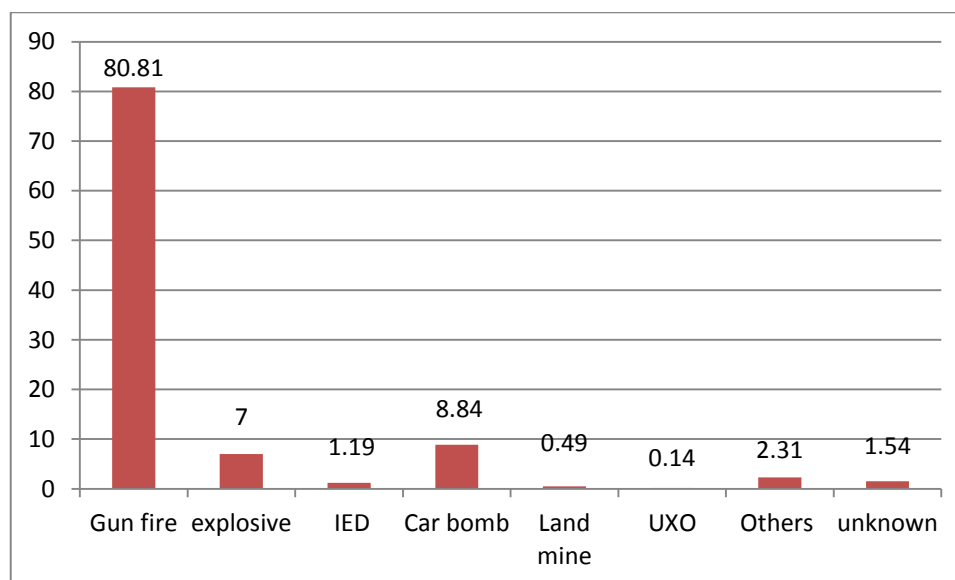


This figure shows that cars were the main cause of fatal-injuries (62.49)% ,followed by pedestrians (31,22) %,then motorcycles (5.41)% .Pedestrians represented higher proportion among fatal-injuries comparing with non-fatal injuries in 2019,when pedestrians represented (10.26) % of non-fatal injuries. See figure (10).

**Table (28); number and percent by mechanism among unintentional –other fatal injuries,2019.**

<b>insurgency</b>	<b>N</b>	<b>%</b>
<b>Gun fire</b>	<b>1154</b>	<b>80.81</b>
<b>explosive</b>	<b>93</b>	<b>7</b>
<b>IED</b>	<b>100</b>	<b>1.19</b>
<b>Car bomb</b>	<b>17</b>	<b>8.84</b>
<b>Land mine</b>	<b>7</b>	<b>0.49</b>
<b>UXO</b>	<b>2</b>	<b>0.14</b>
<b>Others</b>	<b>33</b>	<b>2.31</b>
<b>unknown</b>	<b>22</b>	<b>1.54</b>
<b>total</b>	<b>1428</b>	<b>100</b>

**Figure (31) ; percent by primary cause among insurgency fatal injuries, 2019.**

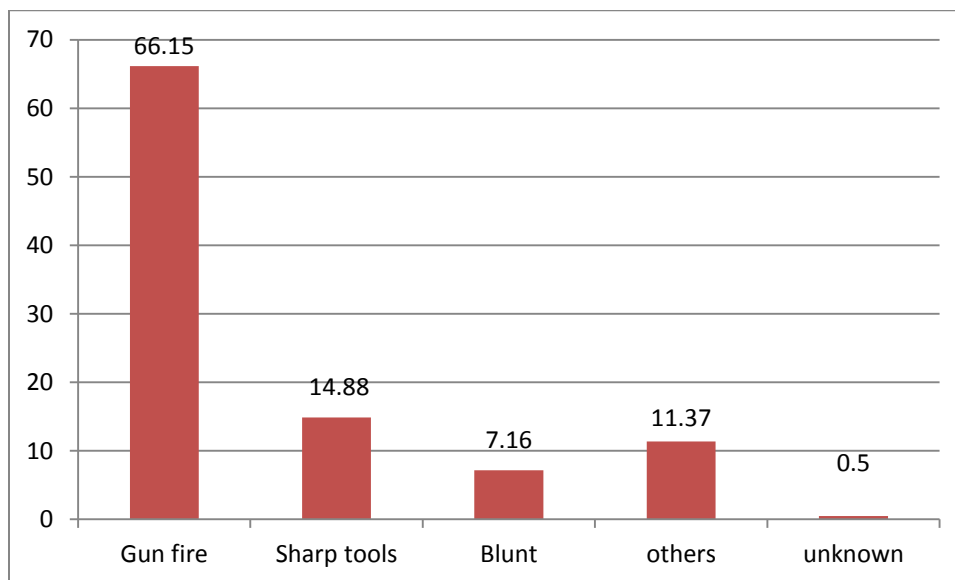


This figure shows gun fire represented the highest percent (80.81) % as mechanism among insurgency fatal injuries, followed by car bomb (8.84) %, then explosion (7) % and improvised explosive device – IED – .

**Table (29); number and percent of primary causes among fatal outside violence injuries, 2019.**

Outside violence	N	%
Gun fire	471	66.15
Sharp tools	106	14.88
Blunt	51	7.16
others	81	11.37
unknown	3	0.5
total	712	100

**Figure (32); percent by mechanism among outside -assault fatal injuries, 2019.**

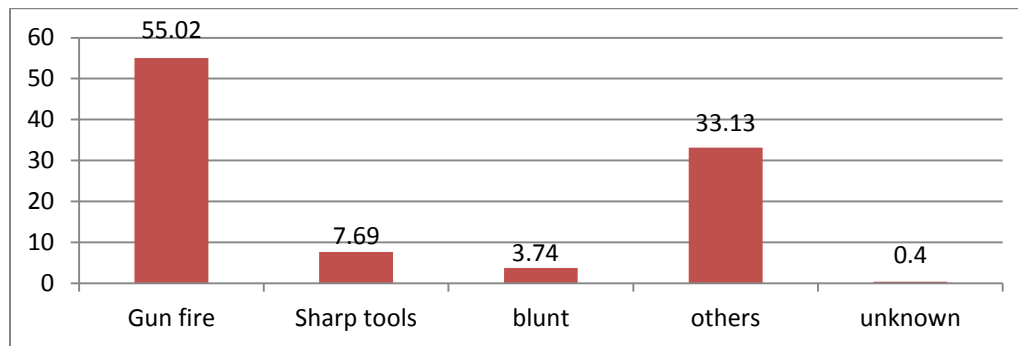


This figure shows that gun-fire (66.15) % represented the main cause of outside violence fatal injuries, followed by sharp tools (14,88) % ,then others and blunt injuries, while in non-fatal injuries the majority of outside violence was due to blunt and sharp tools.

**Table (30); number and percent of primary causes among domestic violence fatal injuries, 2019.**

<b>Domestic violence</b>	<b>N</b>	<b>%</b>
<b>Gun fire</b>	<b>279</b>	<b>55.02</b>
<b>Sharp tools</b>	<b>39</b>	<b>7.69</b>
<b>blunt</b>	<b>19</b>	<b>3.74</b>
<b>others</b>	<b>168</b>	<b>33.13</b>
<b>unknown</b>	<b>2</b>	<b>0.4</b>
<b>total</b>	<b>507</b>	<b>100</b>

**Figure (33); percent of primary cause among domestic violence fatal injuries, 2019.**



This figure shows that majority of domestic violence injuries are due to gun- fire (55.02)% ,while in non-fatal injuries majority was due to sharp tolls and blunt injuries.

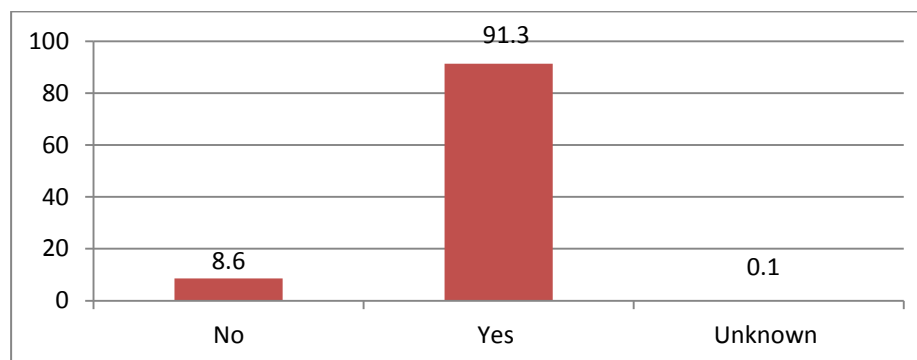
### 3 – 5 mass injury events

Mass injury event is defined as an event that caused five or more injuries.

**Table (31); number and percent of injuries resulting from mass injuries among fatal injuries 2019.**

If mass injury event?	N	%
No	937	8.6
Yes	9955	91.3
Unknown	9	0,1
Total	10901	100

**Figure (34), percent of injuries resulting from mass injuries among fatal injuries recorded in 2019.**



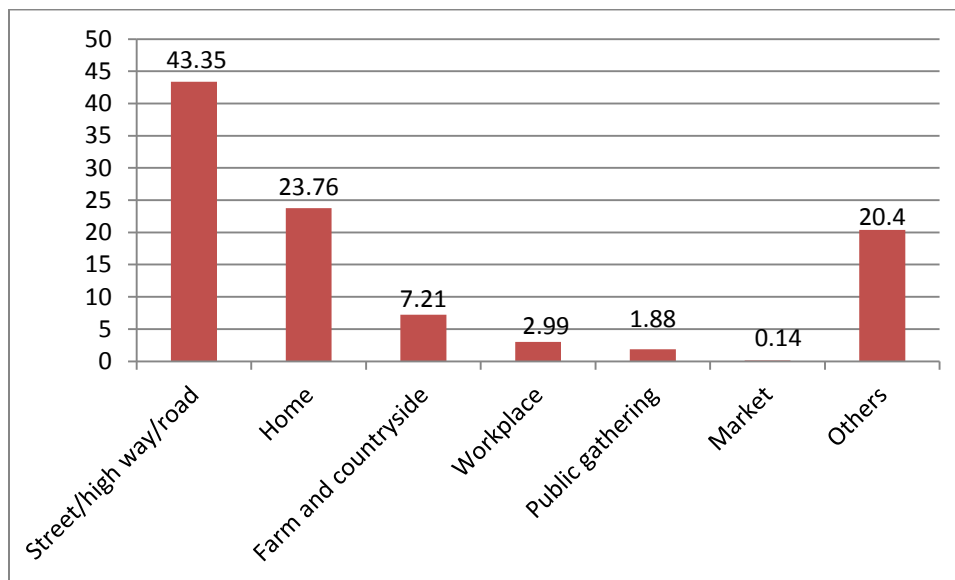
This figure shows about (8.6) % of all fatal injuries resulted from mass events.

### 3 – 6 Distribution according to place of injury

Table(32); percent of fatal injuries according to place among fatal injuries,2019.

Place of occurrence	N	%
Street/high way/road	5095	43.35
Home	2793	23.76
Farm and countryside	848	7.21
Workplace	351	2.99
Public gathering	221	1.88
Market	17	0.14
Others	2398	20.4
Unknown	31	0.26
Total	11754	100

Figure (35): percent of fatal injuries according to place of among fatal injuries,2019.



This figure shows the most common location of fatal injuries was streets / highways/ roads (43.53) %, followed by homes (23.76) %.Farms and countryside, work place, public gathering and markets reported less fatal injuries than streets and homes

About (20.4) % of fatal injuries occurred in places other than that mentioned.



## 4. discussion

### 4.1. key findings and recommendations

- 1- The injury surveillance report 2019 reveals that, external injury is a major public health problem, because it leads to many morbidities and mortalities. The report mentions that the total fatal injuries were (11754), in addition to (91101) non-fatal injuries.  
The health effects of injury needs great efforts from governmental and non-governmental sectors to decrease the impact of this problem.  
A national multisectorial strategy for management ,control and prevention is essential, this strategy should be implemented by ministry of health in collaboration with other ministries and international partners (WHO).
- 2- According to circumstances of injuries road traffic accidents represents the main primary cause (38.55) % from non-fatal injuries and (36.05)% from fatal injuries. Car's occupants and pedestrians represent more than 90% of victims of traffic related injuries, so legislations and prevention programs should concentrate on : providing streets with areas for pedestrian's uses and crossing, controlling streets by cameras for monitoring speed and implementation of safety laws .
- 3- The report reveals that intentional fatal injuries (whether self-harm or by others) were more than(2500), this need psychological programs for prevention and control of intentional injuries especially self-harm and suicides.
- 4- The report illustrates that about (66)% of non-fatal injuries treated in emergency departments and send home ,trauma care centers should be reinforced and emergency departments must be supported to decrease severity an complications of injuries.
- 5- According to the report ,only 8% of non-fatal injuries arrived to emergency department by ambulance ,and (14.5) % got medical care before reaching hospitals. This needs programs for training drivers on first aids and Basic Life Support (BLS) and transferring of injured patients to decrease complications.
- 6- Regarding location of injuries, the report reveals that home represents second place after streets, so health education for prevention risks at home is important. Work place represents other location for external injuries ,so preventive measures and occupational safety in factories and places of work is essential.
7. According to mechanism of injury the report reveals a difference between unintentional non-fatal and fatal injuries other than traffic injuries. For non-fatal injuries, the top mechanisms were falls, animal bites and burns, whereas for fatal injuries the top mechanism was burns , drowning and electrical injuries.  
There is another difference between non-fatal outside and domestic injuries,

when the top mechanisms were sharp tools and blunt injuries with fetal outside and domestic injuries when top mechanism was gun-fire. so this needs programs in collaboration with other sectors and ministries

8- For non-fatal injuries findings should be interpreted with caution as reporting sites are sentinel sites, so expanding of surveillance program to all general hospitals is important for generalization of results.

9 - The percent of arriving to hospital by an ambulance in some health directorates was very few , the reason may be transferring patients to hospitals may be transferring patients to hospitals occurring by ambulances belongs to center of operations and emergency services (especially in Baghdad) with no recording in surveillance system.

## 4.2. Limitations of the Current Surveillance System

The Injury Surveillance in Iraq is now among one of the most robust systems globally, capturing routine data useful for public health programming. The most common limitations of the system are the following.

- **Use of Sentinel Hospitals:** One limitation of the design of the system is that not all hospitals in the governorates are participating in the injury surveillance system. In most governorates there are only 1-2 hospitals participating. The catchment area of these hospitals is unknown. Given that the non-fatal surveillance is not exhaustive calculation of rates is not appropriate.
- **Access:** Because of situations in Iraq ,monitoring, supervision and visiting all sites of collecting data is difficult . Delaying in sending data or silent sites are major limitations of program,.
- **Limited Data/ Variables:** The current surveillance form is intentionally short to limit the burden on the health system. Information on the nature and severity of the injury (fracture, amputation, etc.) and the body region (s) injured (head and neck, torso, etc.) are not collected.
- **Underreporting of intentional injuries:** Intentional self-harm injuries and intentional assaults accounted for a smaller proportion of injuries than seen regionally or globally. This may in part due to under-reporting due to social and cultural reasons. Additional training may be needed so that the intent of the injury can be accurately ascertained.
- **Funding:** Inadequate funding and lack of human resources, particularly skilled personnel, were perceived as challenges to the system in some hospitals. At the national level, additional staff with capacity to analyze and critically review the data is needed. The system is supported by only one full time MOH staff.
- **Monitoring and Evaluation:** Ideally, monitoring and evaluation would be a regular activity to ensure high quality data. Each participating hospital was supposed to evaluate the sensitivity of the surveillance system by comparing the number of injury cases picked by the system with the number of cases registered by the hospital. To date, M&E activities have not been implemented as planned. Sensitivity of the surveillance system is expected to be high but is not known. The national team besides external monitoring from other teams from universities or world health organization or others is very important to insure quality of data obtained.
- **ICD Codes:** The external cause or mechanism of injury is not coded according to ICD codes. Given the limitations of ICD codes, this may not be an immediate priority.

### 4.3. Recommendations for Strengthening Surveillance

The following activities are recommended to improve the surveillance system in the upcoming year:

- **Successful return for out of the surveillance Governorates:** Beginning 2017, at least CO and one ER from liberated governorates reported on injuries. Successful training, monitoring and mentorship will be needed to ensure the quality remains as the program expands.
- **External Evaluation:** The need for an in-depth evaluation of this surveillance system was identified in 2012 but was not feasible given increased insecurity and violence. This evaluation by an external team remains a priority so that partners have a better understanding of the accuracy and completeness of reporting by facility.
- **Regular Quality Assurance:** To ensure quality, a team of trained personnel has begun monitoring data quality. As the system scales up, having more of these teams able to perform routine monitoring visits will be even more essential. This group can also support with training and re-training activities.
- **Enhanced Training:** All individuals involved with collecting the data received some training on how to report. However, we note that problems in coding persist. Targeted trainings to address data quality problems as they are identified can help improve data quality. Some common themes to emphasize include: how to best identify the intention of an injury: when to suspect self-harm or assault (a difficult task given the social and culture realities in Iraq); distinguishing between assault and insurgency activity.
- **The forms:** development of one page form, paper and electronic, may ease the work.
- **Use of the Data:** To date analysis is performed only at the national level. Basic analysis at the governorate level on a more frequent basis (ideally real time) is feasible given that many governorates already enter their own data. Support to build the capacity of governorate level MOH staff to analyze and interpret data could help translate the information into public health action.
- **Collaboration:** Collaboration with international partners (WHO and CDC) should continue in order to maintain high standards of data collection, analysis and reporting.

## 5- Injury surveillance results, 2018.

Table (4) ,number and percent of non-fatal injury according to age group,2018.

### 5-1.Non-fatal injuries,2018

Table (1): number and percent of non-fatal injuries reported by D.O.H, 2018.

D.O.H	N	%
Al-Basra	2938	4.5
Anbar	1564	2.4
Babil	262	0.4
Baghdad	7983	12.23
Baghdad/Rasafa	3439	5.27
Diwaniyah	126	0.19
Dyalah	4982	7.63
Erbil	12558	19.24
Karbala	1938	2.97
Kirkuk	3027	4.64
Misan	1444	2.21
Muthana	1176	1.8
Najaf	4849	7.43
Salaheddin	944	1.45
Sulaimaniya	4734	7.25
ThiQar	11674	17.89
Wassit	1628	2.49
total	65266	100

Age		%
0 --4	5908	9.05
5 --9	6501	9.96
10 --14	5865	8.99
15 --19	8284	12.69
20--24	9801	15.02
25 -29	7584	11.62
30 --34	6318	9.68
35--39	4020	6.16
40 --44	2852	4.37
45 --49	2446	3.75
50 --54	1863	2.85
55 --49	1079	1.65
60--64	989	1.52
65 --69	612	0.94
70 --74	446	0.68
75 --79	193	0.3
80 --84	149	0.23
85 --89	71	0.11
90 --94	28	0.04
95 --99	11	0.02
100 --104	4	0.01
unkno wn	242	0.37
total	65266	100

Table (2): sex distribution non-fatal injuries, 2018.

Gender	N	%
Female	16735	25.64
male	48513	74.33
unknown	18	0.03
total	65266	100

**Table (3): number and percent of non-fatal injuries according to month,2018**

month	n	%
January	5108	7.83
February	4549	6.97
March	6922	10.61
April	5616	8.6
may	5742	8.8
June	4742	7.27
July	6459	9.9
August	6043	9.26
September	5797	8.88
October	5532	8.48
November	4319	6.62
December	4437	6.8
total	65266	100

**Table (5): number and percent of non-fatal injuries according to intention,2018.**

intention	n	%
Intentional by others	3931	6.02
Intentional by self	650	1
others	415	0.64
Unintentional by others	19580	30
Unintentional inflicted by self	34299	52.55
Unknown	6391	9.79
total	65266	100

**Table(6)number and percent of non-fatal injuries according to circumstances and primary cause,2018**

circumstances	cause	n	%	tot	%
insurgency	Gun fire	274	0.42	660	1.01
	Explosive	154	0.24		
	IED	203	0.31		
	Suicide bomber	15	0.02		
	Car bomb	4	0.01		
	Land mine	1	0		
	Others	5	0.01		
	Unknown	4	0.01		
traffic	Pedestrian	1731	2.65	22744	34.85
	Car	16324	25.01		
	Bicycle	445	0.68		
	Motorcycle	4212	6.45		
	Others	30	0.05		
	Unknown	2	0		
Domestic violence	Gun fire	83	0.13	8752	13.41
	Sharp tools	5039	7.72		
	Blunt	3362	5.15		
	Others	241	0.37		
	Unknown	27	0.04		
outside violence	Gun fire	442	0.68	12012	18.4
	Sharp tools	6363	9.75		
	Blunt	4975	7.62		
	Others	225	0.34		
	Unknown	7	0.01		
others	Animal bite	3335	5.11	21098	32.33
	Drowning	52	0.08		
	Poisoning	1260	1.93		
	Falls	13503	20.69		
	Burns	1984	3.04		
	Suffocation	326	0.5		
	Electric injury	566	0.87		
	Others	61	0.09		
	Unknown	11	0.05		
total		65266	100	65266	100

**Table (7): number and percent of mass events in non-fatal injuries, 2018.**

five or more	n	%
YES	1147	1.76
NO	63853	97.84
UNKNOWN	266	0.41
total	65266	100

**Table (9): number and percent of non-fatal injuries according to place of occurrence,2018.**

occurrence of injury	N	%
Farm and countryside	1383	2.12
Home	24665	37.79
Market	239	0.37
Others	71	0.11
Public gathering	300	0.46
Street/high way/road	33781	51.76
Unknown	180	0.28
Workplace	4647	7.12
total	65266	100

**Table (11): number and percent of non-fatal injuries according to management got,2018.**

Management	n	%
Admitted to the hospital	19201	29.42
Dead on arrival	266	0.41
Died in emergency department	61	0.09
Discharged against medical advice	1579	2.42
Other	31	0.05
Transferred to other facility	316	0.48
Treated and sent home	43023	65.92
Unknown	789	1.21
total	65266	100

**Table (8): number and percent of non-fatal injuries according to mode of arrival,2018.**

mode of arrival	N	%
Ambulance	3868	5.93
Other Vehicle	61342	93.99
Others	35	0.05
Unknown	21	0.03
total	65266	100

**Table (10): number and percent of non-fatal injuries, according to pre-hospital care got,2018**

pre-hospital care	N	%
yes	8277	12.68
no	56892	87.17
unknown	97	0.15
total	65266	100



## 5-2.Fatal injuries ,2018

**Table(12) : number and percent of fatal injuries , by (D.O.H),2018.**

D.O.H	n	%
Al-Basra	288	2.54
Anbar	1150	10.14
Babil	941	8.3
Baghdad FOM	2892	25.49
Diwaniyah	407	3.59
Dyalah	670	5.91
Erbil	720	6.35
Karballa	337	2.97
Kirkuk	701	6.18
Misan	471	4.15
Nineva	682	6.01
Muthana	335	2.95
Najaf	569	5.02
Salaheddin	165	1.45
Sulaimaniya	602	5.31
ThiQar	1	0.01
Wassit	413	3.64
total	11344	100

**Table (13) : number and percent of fatal injuries according to month,2018**

month	n	%
January	748	6.59
February	797	7.03
March	887	7.82
April	800	7.05
May	865	7.63
June	975	8.59
July	1135	10.01
August	1136	10.01
September	1381	12.17
October	1043	9.19
November	826	7.28
December	751	6.62
total	11344	100

**Table (14) : number and percent of fatal injuries according to sex,2018.**

Female	3037	26.77
Male	8286	73.04
Unknown	21	0.19
total	11344	100

**Table (16) : number and percent of fatal injuries according to age group,2018.**

age group	n	%
0 4	896	7.9
5 9	661	5.83
10 14	646	5.69
15 19	1383	12.19
20 24	1316	11.6
25 29	1318	11.62
30 34	914	8.06
35 39	755	6.66
40 44	590	5.2
45 49	570	5.02
50 54	453	3.99
55 59	311	2.74
60 64	338	2.98
65 69	255	2.25
70 74	145	1.28
75 79	92	0.81
80 84	52	0.46
85 89	30	0.26
90 94	10	0.09
95 99	7	0.06
unknown	602	5.31
total	11344	100

**Table(15): number and percent of mass events ,fatal injuries ,2018.**

five or more	n	%
NO	9853	86.86
YES	395	3.48
UNKNOWN	1096	9.66
total	11344	100

**Table (17) : number and percent of fatal injuries according to intention,2018.**

intention	n	%
Intentional by others	2072	18.27
Intentional by self	504	4.44
Others	919	8.1
Unintentional by others	4021	35.45
Unintentional by self	3444	30.36
Unknown	384	3.39
total	11344	100

**Table (18),number and percent of fatal injuries according to place,2018.**

place	n	%
Farm and countryside	627	5.53
Home	3219	28.38
Market	29	0.26
Others	1546	13.63
Public gathering	365	3.22
Street/high way/road	5045	44.47
Unknown	103	0.91
Workplace	410	3.61
total	11344	11100

**Table (19): number and percent of fatal injuries according to circumstances and primary cause,2018.**

circumstance	cause	N	%	total	%
insurgency	Gun fire	1131	9.97	1646	14.51
	Explosive	241	2.12		
	IED	167	1.47		
	Suicide bomber	19	0.17		
	Car bomb	11	0.1		
	Land mine	9	0.08		
	Others	37	0.33		
	Unknown	31	0.27		
traffic	Pedestrian	1029	9.07	4186	36.9
	Car	2939	25.91		
	Bicycle	22	0.19		
	Motorcycle	178	1.57		
	Others	16	0.14		
	Unknown	2	0.02		
domestic violence	Gun fire	292	2.57	668	5.89
	Sharp tools	25	0.22		
	Blunt	19	0.17		
	Others	330	2.91		
	Unknown	2	0.02		
outside violence	Gun fire	361	3.18	682	6.01
	Sharp tools	134	1.18		
	Blunt	83	0.73		
	Others	103	0.91		
	Unknown	1	0.01		
others	Animal bite	21	0.19	4162	36.69
	Drowning	654	5.77		
	Poisoning	13	0.11		
	Falls	282	2.49		
	Burns	1415	12.47		
	Suffocation	238	2.1		
	Electric injury	1053	9.28		
	Others	370	3.26		
	Unknown	116	1		
total				11344	100

## 6- Annex 6-1.Iraqi Injury Surveillance (Arabic)

وزارة الصحة - مركز العمليات وطب الطوارئ  
ردهات الطوارئ / الطب العدلي - نظام الرصد الوطني العراقي للحوادث

A معلومات عن المؤسسة الصحية		1 ؟ ردهات الطوارئ		2 ؟ الطب العدلي	
A1	اسم دائرة الصحة	A2	اسم المؤسسة الصحية	A3	رقم المريض/الحالة
B معلومات عن المريض / الحالة					
B1	اسم المريض/الحالة	B2	الجنس ؟ 1 ذكر ؟ 2 أنثى ؟ 9 غير معروف	B3	العمر سنوات
B4	عنوان المريض/الحالة (المحافظة)	B5	رقم شهادة الوفاة	B6	تاريخها / /
C سلسلة الوصول					
C1	تاريخ الإصابة / /	C2	9 غير معروف	C3	تاريخ العثور على الجثة / /
C4	تاريخ الوصول إلى المؤسسة الصحية / /	C5	زمن الوصول	الزمن (23-0) بالتوقيت العالمي	
C6	وقت الإصابة المتوقع	1 ؟ خلال ساعة	2 ؟ خلال ٢٤ ساعة	3 ؟ أكثر من ٢٤ ساعة	9 غير معروف
C7	هل حصل المصاب على إسعاف أولي قبل الوصول للطوارئ في المستشفى	1 ؟ نعم	2 ؟ لا	9 غير معروف	
C8	وسيلة الوصول (اختيار واحد)	1 ؟ سيارة إسعاف	2 ؟ سيارة أخرى	8 ؟ وسيلة أخرى	9 غير معروف
D معلومات متعلقة بالإصابة					
D1	ظروف الحادثة: كيف حدثت الإصابة (اختار إجابة واحدة فقط)				
في حالة اختيار (1.6 و 1.7) يعبأ حقل E					
1 نشاط إرهابي أو عسكري		2 حوادث مرور		3 عنف منزلي	
4 عنف خارجي		5 حوادث أخرى			
1.1	؟ طلق ناري	2.1	؟ راجلاً	3.1	؟ أسلحة نارية
1.2	؟ انفجار	2.2	؟ سيارة	3.2	؟ آلات جراحة
1.3	؟ عبوة ناسفة	2.3	؟ دراجة هوائية	3.3	؟ آلات راضه
1.4	؟ انتحاري	2.4	؟ دراجة نارية	3.8	؟ أخرى
1.5	؟ سيارة مفخخة	2.8	؟ أخرى	3.9	؟ غير معروف
1.6	؟ ألغام أرضية	2.9	؟ غير معروف		
1.7	؟ مخلفات حربية				
1.8	؟ أخرى				
1.9	؟ غير معروف				
D2	عدد المصابين ٥ أو أكثر في الحادثة				
D3	القصود				
1 ؟ مقصودة من قبل الآخرين		2 ؟ مقصودة من قبل المصاب		3 ؟ عرضية من قبل الآخرين	
4 ؟ عرضية من قبل المصاب		8 ؟ أخرى		9 ؟ غير معروف	
D4	المكان الجغرافي للحدث				
المحافظة:		أحيل من مركز شرطة:		المنطقة:	
1 ؟ المسكن		2 ؟ الشارع		3 ؟ مكان العمل	
4 ؟ تجمع سكاني		5 ؟ السوق		6 ؟ الريف أو المزرعة	
7 ؟ مكان وقوع الحادثة (اختار واحدة)		8 ؟ أخرى		9 ؟ غير معروف	
الإجراء الأولي للمريض في ردهة الطوارئ		1 ؟ تمت المعالجة و أرسل إلى المنزل		2 ؟ خرج على مسؤوليته الخاصة	
3 ؟ ادخل المستشفى		4 ؟ متوفى عند الوصول		5 ؟ توفي في ردهة الطوارئ	
6 ؟ نقل إلى مستشفى آخر (حدد):		8 ؟ أخرى		9 ؟ غير معروف	
ملئت بواسطة: _____ تاريخ الإملء / /					
دققت بواسطة: _____ تاريخ التدقيق / /					

E إذا كان الشخص مصاباً نتيجة الألغام أو القذائف غير المنفلقة المتروكة، اسأل المريض الأسئلة الآتية				
E1	عنوان المصاب الكامل	المحافظة: _____	القضاء: _____	الناحية: _____
		الحي: _____	المحلة: _____	زقاق: _____ رقم الدار: _____
		أقرب نقطة دالة: _____		
E2	النشاط في وقت الإصابة (اختار إجابة واحدة فقط)	<input type="checkbox"/> 1 يمشي على قدميه	<input type="checkbox"/> 2 كان في العمل	<input type="checkbox"/> 3 زراعة
		<input type="checkbox"/> 4 متنقل بالسيارة	<input type="checkbox"/> 5 تعليم	<input type="checkbox"/> 6 رعى
		<input type="checkbox"/> 7 إزالة ذاتية للألغام و المخلفات الحربية	<input type="checkbox"/> 8 التسوق	
		<input type="checkbox"/> 9 جمع السكراب	<input type="checkbox"/> 10 اللعب	<input type="checkbox"/> 11 نشاط ديني
		<input type="checkbox"/> 12 عبر حدود	<input type="checkbox"/> 88 أخرى	<input type="checkbox"/> 99 غير معروف
E3	كيف فجر اللغم أو القذيفة المتروكة؟	<input type="checkbox"/> 1 عبث (لاحظ المادة)	<input type="checkbox"/> 2 حادث عرضي عن طريق اللمس أو التخطي عليها (لم يلاحظ المواد)	
		<input type="checkbox"/> 8 أخرى	<input type="checkbox"/> 9 غير معروف	
E4	من فجر المتفجر؟	<input type="checkbox"/> 1 من قبل الشخص نفسه	<input type="checkbox"/> 2 من قبل شخص آخر	<input type="checkbox"/> 3 سيارة <input type="checkbox"/> 9 غير معروف
E5	هل كان الضحية يعلم أن المنطقة ملغومة بالألغام؟	<input type="checkbox"/> 1 نعم لكنه ذهب لأسباب اقتصادية	<input type="checkbox"/> 2 نعم لكنه ذهب لأسباب أخرى	
		<input type="checkbox"/> 3 لا	<input type="checkbox"/> 9 غير معروف	
E6	هل جرح أو قتل أشخاص آخرين في الانفجار نفسه؟	<input type="checkbox"/> 1 نعم	<input type="checkbox"/> 2 لا	<input type="checkbox"/> 9 غير معروف
		عدد المصابين: _____		عدد المتوفين: _____ <input type="checkbox"/> 9 غير معروف

### تعليمات ملء الاستمارة

- يرجى قراءة التعليمات جيداً قبل الإملاء.
- وضع علامة ☒ داخل المربع المناسب و عدم وضع علامات أخرى مثل √ أو ° ... الخ ذلك لتوحيد الأجوبة لمدخل البيانات
- الحرص على ملء جميع حقول الاستمارة بدقة وكما يأتي: اللون الأزرق خاص للطوارئ واللون الأحمر للطب العدلي والأسود مشترك بينهما.
- يجب على الأشخاص الذين يملؤون الاستمارة أن يكتبوا أسمائهم بوضوح و توقيعهم و تاريخ المليء و المصادقة.
- يملأ حقل A من قبل مسؤول البرنامج.
- (B) المقصود ب ( الحالة ) هو المتوفي أو المصاب المحال إلى المعهد.
- (B1) إذا كان الاسم غير معروف بدون غير معروف و لا يترك فارغاً.
- (B3) إذا كان العمر أقل من سنة يكتب ثلاثة أصفار ( ٠٠٠ ) و يقدر عمر المصاب في حالة عدم معرفته و أن لم تتمكن من ذلك أكتب ( ٩٩٩ ) .
- الوقت حسب التوقيت العالمي من ( ٢٣-٠ ) و بالساعات فقط و تهمل أجزاء الساعة و بالنسبة للساعة ١٢ ليلاً فتكتب ( ٠٠ ) .
- الانتباه إلى التسلسل المنطقي بين تاريخ الإصابة و تاريخ الوصول و تاريخ الإملاء و أن لا يقدم تاريخ الإملاء أو الوصول قبل تاريخ الإصابة.
- (C8) يعني بالوسيلة الأخرى أية وسيلة غير الإسعاف والسيارات (عربة، دراجة، طائرة،... الخ) تذكر.
- (D1) في حالة اختيار فقرة ١.٦ ألغام و ١.٧ مواد قابلة للانفجار يجب ملئ حقل E
- (D1 ١.٢) عبارة - انفجار- تتضمن كل الانفجارات غير معروفة السبب و المقذوفات عن بعد مثل صواريخ ، هاونات، طائرات أو أي مقذوف آخر.
- (D1 ٢.٨) أخرى يقصد بها آلية حدوث الإصابة مما لم يذكر أعلاه مثل (عربة دفع، حيوان، قطار أو غيرها).
- (D5) تجمع سكاني يشمل دور العبادة ( مسجد، كنيسة.. الخ ) أو التجمعات لأغراض التطوع أو لأغراض التدريب... الخ.
- ينبغي بذل الجهد للتفريق بين النشاط الإرهابي و العنف خارج المنزل.

CO <input type="checkbox"/> 2		ER <input type="checkbox"/> 1		<b>A</b> Reporting Site <b>HEALTH FACILITY INFORMATION</b>					
Patient / Case number _ _ _ _		A3	Name of Health Facility_____		A2	Name of Health Directorate _____		A1	
PATIENT DEMOGRAPHIC INFORMATION <b>B</b>									
Age _ _ _ Years		B3	Gender <input type="checkbox"/> 1 Male <input type="checkbox"/> 2 Female <input type="checkbox"/> 9 Unknown		B2	Patient\ Case full Name_____		B1	
Date of Death Certificate _ _ _ / _ _ / _		B6	Death Certificate No _ _ _ _ _ . _ _ _		B5	Patient\ Case Address ) Governorate ( _____		B4	
<b>C</b> ARRIVAL SEQUENCE									
Date of Cadaver Found / _ _ / _ _ _ _		C3	Time of Injury _ _		C2	<input type="checkbox"/> Date Unknown 9	Date of injury _ _ / _ _ / _ _ _ _	C1	
Time ) 0-23 (International time			Time of arrival _ _		C5	Date of arrivall to the health facility _ / _ _ / _ _ _ _ _		C4	
<input type="checkbox"/> Unknown 9	<input type="checkbox"/> 3 More than 24 hours		<input type="checkbox"/> 2 within 24 hours		<input type="checkbox"/> 1 within 1 hour		Time from injury to arrival	C6	
<input type="checkbox"/> Unknown 9	<input type="checkbox"/> 2 No		<input type="checkbox"/> 1 Yes	Patient got medical care before coming to ER?				C7	
<input type="checkbox"/> Unknown 9	<input type="checkbox"/> 8) Others(not a car(		<input type="checkbox"/> Other vehicle 2		<input type="checkbox"/> 1 Ambulance		Mode of Arrival) one choice(	C8	
<b>D</b> INJURY RELATED INFORMATION									
fill field E selected )1.6 و 1.7 ( If					Circumstances (How was the injury inflicted) (one choice(			D1	
Others 5		4 Outside Violence		3 Domestic Violence		2 Traffic Accidents		1 Explosion Accidents	
<input type="checkbox"/> Animal bite	5.1	<input type="checkbox"/> Gun fire	4.1	<input type="checkbox"/> Gun fire	3.1	<input type="checkbox"/> Pedestrian	2.1	<input type="checkbox"/> Gun fire 1.1	
<input type="checkbox"/> Drowning	5.2	<input type="checkbox"/> Sharp tools	4.2	<input type="checkbox"/> Sharp tools	3.2	<input type="checkbox"/> Car	2.2	<input type="checkbox"/> Explosive 1.2	
<input type="checkbox"/> Poisoning	5.3	<input type="checkbox"/> Blunt	4.3	<input type="checkbox"/> Blunt	3.3	<input type="checkbox"/> Bicycle	2.3	<input type="checkbox"/> IED 1.3	
<input type="checkbox"/> Falls	5.4	<input type="checkbox"/> Others	4.8	<input type="checkbox"/> Others	3.8	<input type="checkbox"/> Motorcycle	2.4	<input type="checkbox"/> Suicide bomber 1.4	

<input type="checkbox"/> Burns	5.5	<input type="checkbox"/> Unknown	4.9	<input type="checkbox"/> Unknown	3.9	<input type="checkbox"/> Others	2.8	<input type="checkbox"/> Car bomb	1.5	
<input type="checkbox"/> Suffocation	5.6					<input type="checkbox"/> Unknown	2.9	<input type="checkbox"/> Land mine	1.6	
<input type="checkbox"/> Electric injury	5.7					<input type="checkbox"/> UXO	1.7			
<input type="checkbox"/> Others	5.8					<input type="checkbox"/> Others	1.8			
<input type="checkbox"/> Unknown	5.9					<input type="checkbox"/> Unknown	1.9			
<input type="checkbox"/> 9 Unknown			<input type="checkbox"/> 2 No		<input type="checkbox"/> 1 Yes		Were 5 or more people injured in this incident			D2
<input type="checkbox"/> 3 Unintentional inflicted by others			<input type="checkbox"/> 2 Intentional inflicted by self			<input type="checkbox"/> 1 Intentional inflicted by others		Intention	D3	
<input type="checkbox"/> Unknown 9			<input type="checkbox"/> Others 8			<input type="checkbox"/> 4 Unintentional inflicted by self				
District _____ :		Police Station _____ :			Governorate : _____		Geographical location of incident		D4	
<input type="checkbox"/> 5 Market	<input type="checkbox"/> 4 Public gathering	<input type="checkbox"/> 3 Workplace	<input type="checkbox"/> 2 Street	<input type="checkbox"/> 1 Home	Place of occurrence) one choice(				D5	
<input type="checkbox"/> Unknown 9		<input type="checkbox"/> 8 Others	<input type="checkbox"/> 6 Farm and countryside							
<input type="checkbox"/> 2 Discharged against medical advice		<input type="checkbox"/> 1 Treated and sent home			Initial patient disposition in emergency department				D6	
<input type="checkbox"/> 5 Died in emergency department		<input type="checkbox"/> 4 Dead on arrival		<input type="checkbox"/> 3 Admitted to the hospital						
<input type="checkbox"/> 6 Another Hospital) specify _____ :(										
<input type="checkbox"/> Unknown 9		<input type="checkbox"/> 8 Others								

Sig.	Date of Filling _____ / ____ / ____	Filled by _____ :
Sig.	Date _____ / ____ / ____	Checked by _____ :

جمهورية العراق  
وزارة الصحة

تقرير برنامج رصد الاصابات الخارجية العراقي عام ٢٠١٩

اعداد:

الدكتور: جاسم محمد خويف

MB.CHB.D.P.H

مدير برنامج رصد الاصابات الخارجية العراقي

ت	فريق العمل	العنوان الوظيفي
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٢	د.ضياء طيعان جاسم	مدير قسم العمليات
٣	د.جاسم محمد خويف	مسؤول البرنامج
٤	د.رشا رحيم كريم	طبيبة اختصاص
٥	احمد عباس عبدالكاظم	مبرمج اقدم
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٢	د.منى عطاالله	مدير قسم الامراض غير الانتقالية
٣	د.حنان حسن	منظمة الصحة العالمية



## الخلاصة:

### Iraqi Injury Surveillance يوفر برنامج رصد الاصابات الخارجية العراقي

معلومات هامة جدا حول الاصابات الخارجية التي تراجع اقسام الطوارئ في المستشفيات والوفيات الناجمة عنها والمسجلة في دائرة الطب العدلي وشعب الطب العدلي في المحافظات. ان استخدام هذه المعلومات الموثقة سيقول من عبء الاصابات وما تسببه من وفيات واعاقات في المجتمع.

- يتم جمع البيانات من خلال دوائر الصحة في كافة محافظات العراق ، حيث تستلم البيانات من اقسام الطوارئ في المستشفيات للإصابات غير المؤدية الى الوفاة ، بينما تستلم بيانات الاصابات المميتة من دائرة الطب العدلي في بغداد وشعب الطب العدلي في دوائر الصحة ، وبعد جمع البيانات في اقسام العمليات التابعة الى دوائر الصحة ترسل شهريا الى برنامج رصد الاصابات في قسم العمليات / مركز العمليات وطب الطوارئ في وزارة الصحة.

- يتم استلام البيانات من قبل العاملين في البرنامج وادخالها الكترونيا وفق استمارة خاصة اعدت بواسطة برنامج Epi-Info ، حيث تتضمن الاستمارة المعلومات الديموغرافية وتاريخ الاصابة ونوعها والاجراءات المتخذة وغيرها من المعلومات.

وفيما يلي ملخص التقرير السنوي لرصد الاصابات الخارجية لعام ٢٠١٩:

- كافة دوائر الصحة في العراق ودائرة الطب العدلي ارسلت بيانات عام ٢٠١٩ ماعدا دائرة صحة دهوك (لم ترسل بيانات الطوارئ والطب العدلي).

- يوضح التقرير السنوي لرصد الاصابات الخارجية في العراق لعام ٢٠١٩ ، ان العدد الكلي المسجل للإصابات غير المميتة هو (٩١,١٠١) حالة، بينما العدد الكلي للإصابات المميتة هو (١١,٧٥٤) وفاة

- يوضح التقرير السنوي لعام ٢٠١٩ ان الذكور يمثلون اكثر من ٧٦% من الاصابات المميتة وغير المميتة كما يوضح ان الاصابات والوفيات تحدث في كافة الفئات العمرية والفئة العمرية الاكثر تعرضا هي (١٥-٢٩) سنة.

- حسب البيانات التي جمعت من دوائر الصحة عام ٢٠١٩ فأن العدد الاكبر من حالات الاصابات غير المميتة كان في ذي قار ثم اربيل ثم البصرة ، اما ما يخص الاصابات المميتة فأن عدد الوفيات الاكبر سجلت من دائرة الطب العدلي بغداد ثم النجف ثم بابل.

- حسب استمارة البرنامج تم توزيع الاصابات الى:
- اولا: الاصابات غير المقصودة سواء بسبب الشخص نفسه او بسبب الاخرين.
- ثانيا: الاصابات المقصودة (العمدية) سواء من قبل الشخص نفسه او من قبل الاخرين.
- ثالثا: الاصابات غير معروفة القصد.
- من خلال تحليل البيانات لعام ٢٠١٩ بحسب القصد (النية) جاءت الاصابات غير المقصودة
- اولا ثم الاصابات المقصودة (العمدية) وبعدها الاصابات غير المعروفة القصد.
- وبتحليل البيانات حسب ظروف الحادث للإصابات غير المميتة فأن اصابات الطرق جاءت
- اولا ثم الاصابات الاخرى (كالسقوط والحروق وعضة الحيوان. الخ)، اما في الاصابات
- المميتة جاءت اصابات الطرق ثم حوادث الحروق والصعقات الكهربائية وحوادث الغرق اما
- في الاصابات المميتة فأن اصابات الطرق جاءت اولا ثم الحروق يتبعها الغرق ثم الصعقات
- الكهربائية.
- ان التقرير النهائي عام ٢٠١٩ للإصابات غير المميتة الناتجة عن اصابات الطرق يوضح ان
- اكثر المعرضين للإصابة هم مستخدمو السيارات ثم الدراجات النارية ثم المشاة واخيرا مستخدمي
- الدراجات الهوائية، اما ما يخص الاصابات المميتة فأن مستخدمي السيارات كانوا اول الضحايا ثم
- المشاة ثم مستخدمي الدراجات النارية وبنسبة قليلة جدا مستخدمي الدراجات الهوائية.
- ان حوادث الطرق وما تسببه من اصابات مميتة في تزايد واضح من خلال المقارنة مع ارقام
- السنوات السابقة كما ان تسجيل اصابات لأنواع مركبات غير خاضعة للسيطرة النوعية (التك
- تك) مثلا في تزايد.
- ظهر من خلال التقرير لعام ٢٠١٩ ان (حوالي ٦٦ %) من الاصابات غير المميتة وبكافة
- انواعها تم علاجها في ردهات الطوارئ وخرجت متحسنة.
- كما ظهر من التقرير ان حوالي (٨٥%) من المصابين بإصابات غير مميتة لم يتلقوا عناية
- طبية وصحية قبل الوصول الى ردهات الطوارئ واقل من (١٥%) من المصابين فقط قد تلقوا
- نوعا من العناية الطبية او الصحية قبل الوصول الى ردهات الطوارئ.
- يبين التقرير ان ترتيب الاصابات غير المميتة والمميتة حسب مكان وقوع الحادث على النحو
- التالي : اولا الطرق الخارجية والشوارع ، وثانيا المنازل ثم اماكن العمل ثالثا.
- يوضح التقرير ان حوالي (٨%) فقط من المصابين بإصابات خارجية غير مميتة نقلوا الى
- ردهات الطوارئ بسيارات اسعاف بينما النسبة الاكبر تم نقلها بواسطة وسائل نقل اخرى.

## التوصيات:

- ١- استنادا الى المعلومات الواردة في تقرير رصد الاصابات ٢٠١٩ فأن عبء الاصابات لايزال مشكلة صحية في العراق ،حيث يوضح التقرير ان عدد الوفيات الناجمة عن الاصابات كان (١١٧٥٤) وفاة بالإضافة الى (٩١١٠١) اصابة غير مميتة ، ولغرض الحد من الوفيات والاصابات والاعاقات الناجمة عن الاصابات ينبغي القيام بفعاليات وبرامج علاجية وتأهيلية ووقائية وبما ان مشكلة الاصابات تمثل مشكلة متعددة والقطاعات من حيث التخطيط والتنفيذ والوقاية فأن تبني استراتيجية وطنية لوزارة الصحة بالتعاون مع الوزارات الاخرى وباشتراك منظمة الصحة العالمية بات امرا ضروريا.
- ٢- يوضح التقرير النهائي عام ٢٠١٩ ان اصابات الطرق تمثل السبب الرئيسي للإصابات حث تمثل نسبتها (٣٨,٥٥%) من الاصابات غير المميتة و ٣٦% من الاصابات المميتة كما يبين التقرير بأن مستخدمي السيارات والمشاة يمثلون حوالي ٩٠% من مجموع الاصابات وان الاصابات المميتة تؤثر بشكل اكبر على المشاة مما في الاصابات غير المميتة وعلى ضوء ذلك ينبغي العمل على تشريع القوانين التي تنظم السير واماكن خاصة للعبور مع مراقبة الشوارع بالكاميرات للحد من السرعة والالتزام بوسائل السلامة والامان.
- ٣- يوضح التقرير بأن الاصابات المميتة ، سواء ايداء النفس او الاخرين قد سببت فقدان حياة اكثر من ٢٥٠٠ شخص مما يحتم تبني برامج نفسية للحد منها خصوصا ايداء النفس والانتحار.
- ٤- يبين التقرير ان حوالي ٦٦% من الاصابات غير المميتة قد تم علاجها وخرجت متحسنة بعد زيارة اقسام الطوارئ في المستشفيات وهذه نسبة جيدة ومشجعة تتطلب الاهتمام بردهات الطوارئ وانشاء مراكز العناية بالحوادث (trauma center) للحد من الاصابات وتقليل مضاعفاتها. بالإضافة الى دعم اقسام الطوارئ في المستشفيات.
- ٥- بحسب التقرير فأن ٨% فقط من الاصابات غير المميتة قد تم نقلهم بسيارات اسعاف وان ١٤,٥% فقط من الاصابات قد تلقوا عناية صحية وطبية قبل الوصول الى ردهات طوارئ وهذا يتطلب جهود كبيرة سواء في التعريف بخدمة ١٢٢ للإسعاف الفوري او تدريب السائقين الاخرين وعموم المجتمع على الاسعافات الاولى والاساليب الصحيحة لنقل الاصابات لغرض تقليل المضاعفات.

٦- يوضح التقرير بأن البيوت تمثل السبب الثاني بعد الطرق والشوارع لحدوث الاصابات وعليه فأن التوعية والتثقيف بالمخاطر المنزلية مهم جدا خصوصا ان نسبة لا بأس بها من الاصابات للفئة العمرية (صفر-٤) سنوات اما الاماكن الاخرى لحدوث الاصابات فهي اماكن العمل مما يتطلب التنسيق مع الجهات المعنية ووزارة العمل والشؤون الاجتماعية لتفعيل برامج السلامة المهنية والوقائية من اصابات العمل

٧- يبين التقرير وحسب الية الاصابات ،ان اكثر الاصابات غير المقصودة (عدا اصابات الطرق) هي (السقوط ، عضه الحيوان ، والحروق...الخ) بينما في الاصابات المميتة فان اكثر الأسباب هي (الحروق ،حوادث الغرق والصعقات الكهربائية...الخ)،كما ان اكثر الأسباب في اصابات العنف الخارجي والعنف المنزلي غير المميتة هي (الآلات الحادة والآلات الراضة)، بينما السبب الرئيسي في الاصابات الخارجية والمنزلية المميتة هي الاطلاقات النارية. وللد من هذه الاصابات فأن هناك جهدا كبيرا يجب بذله من كافة الاطراف.

٨- ان الاصابات غير المميتة وبسبب تسجيلها في اماكن رصد مختارة في بعض المستشفيات وليس جميعها، ينبغي توخي الحذر عند المقارنة بينها للسنوات المختلفة لصعوبة تعميم النتائج وعليه فان توسيع البرنامج ليشمل كافة المستشفيات العامة امر هام جدا.

٩- يوضح التقرير بأن نقل الاصابات بواسطة سيارات الاسعاف قليل جدا وربما كون الحالات (خصوصا في بغداد) تنقل بسيارات تابعة الى قسم الاسعاف الفوري التابع الى مركز العمليات وطب الطوارئ وليس الى دوائر الصحة وبالتالي عدم تسجيلها ضمن البرنامج وعلى قسم الاسعاف الفوري تحري سبب ذلك ووضع الحلول المناسبة.