# The Reality Traffic Accidents in Algeria A comparative study between Algeria and the Arab countries and the developed

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#### **Abstract**

This study aims to determine the size of traffic accidents and indicators of gravity in Algeria, and the disclosure of the causes of their occurrence in order to take the necessary preventive measures to reduce the aggravation, as well as the knowledge of location Algeria between the developed and the Arab countries in the field of traffic safety. The use of the statistical approach by dealing with numbers, rates and descriptive analytical method being characterized by a detailed description of the exact information and help to the comprehensive and in-depth analysis of the problem under study. It is the findings of this study, is that the number of traffic accidents in Algeria continues to increase, and is the human factor is the main culprit in the occurrence. Received indications showed the seriousness of incidents committed, and exceeded these indicators are those recorded in some developed countries and the Arab countries.

Keywords: driver, vehicle, road, traffic accidents, and prevention.

#### 1. Introduction

Traffic accidents are considered the most serious social and security problems of the majority of nations in the modern era without exception, whether developing or developed ones, due to the great attention given to vehicles in recent years, leading to a doubling of their numbers. Although it is considered a means of transport and recreation will benefit everyone, but it has turned out, however, because the risk created by the human and economic losses as a result of misuse, and that has touched all walks of different ages and races, cultural, social and professional levels.

This problem is illustrated sharply and significantly in developing countries, which confirms both the WHO and the World Bank that traffic accidents are the second leading cause of death among the world's population, especially among the age group of 5 years to 29 years, it is also the third leading cause of death among the world's population in the age group of 30 years to 44 years. And traffic accidents kill more than 1.2 million people a year, an average of 3,300 people every day, no deaths every thirty seconds, And lead to injury and disability between 20 and 50 million people worldwide. The cost of injuries caused by traffic accidents in developing countries about \$65 billion a year, and this amount is more than for what you get from these countries financial aid ((www.emro.who.int / predd Releases / 2004 / no 3 ar. Html. It thus represents one of the most important impediments to development in developing countries process, where lies the seriousness of traffic accidents with leave it on the individual and society from several effects, including economic, social and psychological.

Arab countries are suffering like all other countries in the world the phenomenon of increased unit phenomenon of traffic accidents every day, and their economies bear physical and moral consequences which is to injuries, death, damage to vehicles, the psychological and social diseases. The World Health Organization that the continuation of the current situation in the Arab region will increase the number of deaths and injuries due to traffic accidents and these reasons have warned.

In Algeria has emerged a kind of awareness on the official and unofficial levels to confront the danger of the outcome of the phenomenon of traffic accidents, contributed to accelerate reforms in laws affecting walk across the road, and to take preventive measures in the field of traffic safety. In light of the above, we ask the following questions:

What are the trends and levels of traffic accidents in Algeria? What is the site of Algeria in the field of traffic accidents between developed countries and the Arab countries? What are the preventive measures taken to reduce the aggravation of this phenomenon?

# 2. Objectives of the study

This study aims to achieve the following:

- Knowledge of traffic accidents and indicators of gravity in Algeria size;
- Disclosure of the causes of traffic accidents in Algeria;
- Knowledge of location Algeria between the developed and the Arab countries in the field of traffic accidents;
- show the preventive measures taken to curb the growing phenomenon of traffic accidents.

# 3. Study Methodology

Required by the nature of this study, the use of descriptive analytical method, where data were collected from various sources available were classified in the manner that allows interpretation and knowledge of their evidence in order to take effective preventive measures. This study also fall within the causal studies through the presentation of the most important factors causing car accidents in Algeria to reach the right strategy proposed by the study to reduce the negative results of this phenomenon. If the statistical method common denominator of various research methods, this study used the data analysis in the folds display phenomenon, so that it can be trusted as reached by this research results.

#### 4. Data source

Been relying in this study on annual data, quarterly and monthly provided by the National Center for the protection of the security of the roads, a comprehensive national data for each country give a general picture of traffic accidents on the national level, the first body technique in the field of traffic safety in Algeria.

#### 5. The important of the Study

Based importance of this study is to attempt to disclosure of a dangerous phenomenon in our country, a traffic accident, and to draw attention to the seriousness of that increase from day to day. This is the phenomenon of negative social phenomena that are trying to control all the countries of the world and prevention through various roads and the media by providing programs to educate and sensitize the citizens to understand the seriousness of the phenomenon so that prevention process to be easy and common to all.

# 6. Determine General Concepts

Defined Dictionary "almawred" traffic accident as a "coincidental" or "sudden incident", and defined by the Dictionary "Webster" English as any accidental occurrence or unexpected, and that means not being able to respond to this incident and find a solution to it because of surprise cannot be avoided.

Some defined by the as an interceptor event that occurs without prior planning by a car (vehicle (one or more with the cars (Vehicles) and other facility or animals or objects on the road to a public or private. Usually result in traffic accident damage ranging from minor to property and vehicles to the grave lead to death or permanent disability (Yasser Abdullah Asiri et al., 2009, p. 4).

Others consider that traffic accidents are caused by a lot of injuries and deaths of individuals, damage to public and private property, and that these accidents are one of the dimensions of the traffic problem, which is a set of behaviors and abnormal behaviors of some members of the community, which are not sanctioned by society, and works to get rid of these behaviors (Abdul Rahim Hassan Saleh et al., Kuwait, 2002).

There are those who defined by the as "everything that happens to the vehicle or where while walking due to the availability of certain conditions, without expecting or earlier measure of any of the parties involved in the incident, resulting in loss of life or loss of property or injury to the objects" (Bin Muhsin Muhammad Subhi Abdul Aziz, 1998, p. 29).

And defined by the World Health Organization as "the incident is deliberate, resulting in injury to the phenomenon" (Yusuf Ahmed Taima, 1990, p. 7).

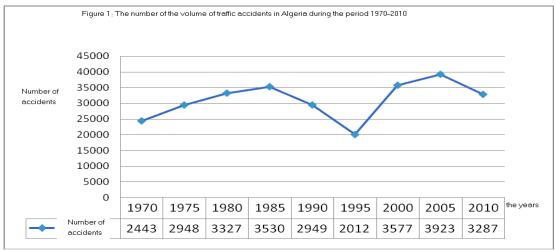
Therefore, we defined traffic accidents as a result of everything that happens to use the vehicle and result in loss of life or bodily injury, or loss of equipment and property, and that the individuals involved in without expecting or prior knowledge. It prescriptions accidents is the lack of expectation and surprise in the fact, which requires the individual's full briefing and awareness of the risks caused by him and his equipment and others. It includes the definition of the traffic incident provides the following elements: error, the vehicle, the highway material and human losses or any resulting deaths and injuries and damage losses in the public and private property.

- **Physical traffic accident**: Is the car crash that leaves the victim of at least either wounded or dead, and are excluded from this definition all the material accidents that had no discernible injuries. And distinguish three types of physical accidents which (Ministère des Transports, 1974, p15.):
- Fatal accident: it is all an accident causing at least one dead, even after 30 days of the accident.
- A dangerous accident: it is all an accident causing at least one injured and requires hospitalization or medical interest for more than 24 hours.
- **Simple accident**: it is all an accident leaves injuries not requiring hospitalization or medical interest for more than 24 hours. The definition of the European Economic Committee that each collision occurred on a public road, and the vehicle and at least one involved in it, at least behind the victim (Commission économique pour l'Europe, 1998, P.133).
- Material accident: it is all an incident occurring in the public road and be at least one vehicle reason it succeeds only material losses without casualties (Soalehi Rabia 0.2000, p. 11).
- **Driver**: is all of driving a vehicle or an ordinary motorcycle, or driving an animal or a ride in the road and actually control it.
- Vehicle: It is all prepared to walk on the main road such as cars, tractors, trailers and others.

# 7. Development of the volume and toll road traffic accidents in Algeria

## 7.1 development of the volume of traffic accidents

Harvested daily traffic accidents, where dozens of lives recorded nearly 4,100 victims killed each year and 50 thousand wounded, according to the National Center for the prevention of traffic accidents, in the absence of humanity and a sense of responsibility and a lack of respect for laws to change the fat and get used to the indifference and lack of discipline. And Figure 1 shows the development of the number of traffic accidents during the period 1970-2010



Source: prepared by the researcher based on data from the National Center for the Prevention and security across the roads

Figure 1 indicates that development of the volume of traffic accidents during the period from 1970 to 2010 over the four different stages:

The first stage (1970-1985): This stage was characterized by the continuous rise in the number of traffic accidents, which have been recorded 24,437 incidents in 1970 and then rose gradually to reach 35 308 incidents in 1985. While the definition of the rate of increase continuing decline during the same period after it had been 3.94 % during the period 1970-1975 decreased to 2.49% during the period 1975 to 1980 and then to 2.32% during the period 1980-1985.

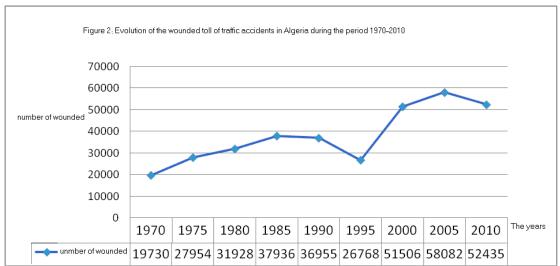
The second stage (1986-1995): the definition of this stage a decrease felt in the number of traffic accidents, having had 35,308 accidents in 1985 fell to 29,493 incidents in 1990 and then to 20,127 incidents in 1995, the estimated decline rate of 3.52% during the period 1985-1990 and 7.08 % during 1990-1995. We can explain that security conditions that were experienced by the country at the time on the one hand and the application of the Traffic Act 87/09 dated 10 February and on the organization of the traffic across the roads and safety on the other hand

The third stage (1996-2005): This stage was marked by the return of the high number of accidents from 20,127 incidents in 1995 to 35,771 incidents in 2000 and then to 39,233 incidents in 2005. The estimated growth rate 12.25% over the period 1995-2000 and 2.1% during the period 2000- 2005. It can be explained by the relative improvement in the security situation of the country on the one hand, and the inadequacy brought by the law 01/14, issued in August 2001, which was amended and integral part of the law 87/09, a special aspect of the deterrent, but it did not achieve the desired goal of it and because of the lack rigor necessary for the success of the various articles of this law, and the law 87/09 dish for 14 years, making him not commensurate with the developments in the field of transport on the other.

**Fourth stage (2006-2010):** This stage was Distinguishd decrease in the number of traffic accidents from 39,233 incidents in 2005 to 32,873 incidents in 2010, ie a decline of 3%. This phase coincided status 09/03 Traffic Act, which aimed to improve the organization of the largest and traffic, which contributed significantly to the reduction of accidents during this period.

## 7-2 development of the number injured traffic accidents

Shown by Figure 2 that the development of the number of injured Defined the same path which the same stages undergone by the development of Number of accidents during the period from 1970 to 2010.

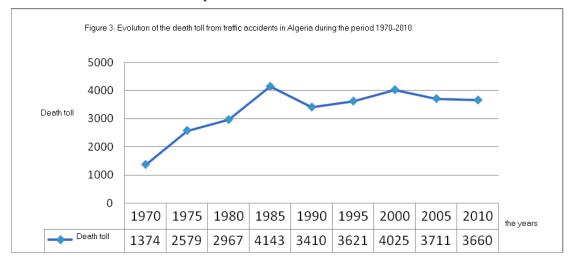


Source: prepared by the researcher based on data from the National Center for the Prevention and security across the roads

When our observation of the curve chart, we find that the number of injured traffic accidents in the same pace of change has changed about Number of accidents, and this expresses the the seriousness of traffic accidents committed.

## 7-3- development of the death toll from traffic accidents

It is development of the number of deaths resulting from traffic the first face of the losses resulting from these phenomenon accidents during the period between 1970 and 2012, and Figure 3 clearly shows the path of development of the number of dead in this period.



Source: prepared by the researcher based on data from the National Center for the Prevention and security across the roads

Defined development of the number of deaths resulting from traffic accidents during the period from 1970 to 2010 in four stages:

The first stage (1970-1985): This stage distinguished constant and rapid rise in the number of the dead, where he moved from 1374 people in 1970 to 4,134 people in 1985, the proportion of the increase amounted to 17% during the period 1980-1985.

**The second stage (1986-1990):** This quintet distinguished down significantly in the number of deaths increased by 3.68% since moved toll of 4143 people in 1985 to 3410 deaths in 1990.

**Third stage (1991-2000):** was characterized by a gradual rise in the number of the dead, where he moved from 3410 deaths in 1990 to 4025 people in 2000 with a rise estimated amounted to 1.62% during the period 1991 to 1995 and 2.26% during the period 1995-2000.

**Fourth stage** (2001-2010): distinguished this decade a gradual decrease in the number of the dead, where he moved from 4025 people in 2000 to 3,660 people in 2010. The decrease amounted to 1.14 percent during the period from 2000 to 2005 and 0.37% during the period 2005-2010.

#### 8. Indicators dangerous traffic accidents in Algeria

Traffic accidents and as a occupies an important position in perpetuating the human and material losses at the national level, it is one of the most important risks that threaten human, so you must know to what extent contribute to these incidents of human losses during the period 2000-2012.

To identify the size and the seriousness of traffic accidents in Algeria have been resorting to the use of some conventional indicators it as described in Table 1.

dangerous traffic accidents indicators Year Death toll number of wounded Per hundred Per million per million Per hundred Per million per million inhabitants accident vehicles accident inhabitants vehicles 881.7 10.3 151.5 1810.2 12744.6 Average Source: National Center for the Prevention and security across the roads.

Table 1: Indicators dangerous traffic accidents in Algeria during the period 2000 to 2012

It became clear to us through our reading of the data in Table 1 that the number of deaths per hundred accident ranged between 9 and 11 people during the period from 2000 to 2012 an average of 10.3 deaths per hundred accident, while the number of wounded ranged between 136 and 163 wounded during the same period, an average of 151.5 per hundred injured accident.

But if we link the number of killed and wounded a number of the population, we note that the number of dead index per million population ranged between 103 and 138 people were killed during the period from 2000 to 2012 an average of 125 people per million inhabitants, and the other hand ranged from the number of injured between 1473 and 2000 injuries per million inhabitants, an average of 1810.2 people per million inhabitants

To identify the impact that changing the number of vehicles on the number of casualties caused by traffic accidents during the mentioned period, it was used index number of dead and injured index per million vehicles. It shows through the data table above that the greatest value of the first index stood at 1366 deaths were recorded in 2000 and the smallest value recorded in 2010 which amounted to 591 people, and the average values of this indicator is 881.7 deaths per million vehicles. As for the second indicator values, ranged between 8462 wounded were recorded in 2000 and 17 474 wounded and recorded in 2010, the average values of this index 12744.6 injuries per million vehicles. Generally shown by changing the values of these indicators during the period 2000-2012 that there is an improvement in the level of seriousness of traffic accidents in Algeria.

# 9. Causes of traffic accidents

Characterized by traffic accidents as a social phenomenon is complex when studied and analyzed, and the word accident suggests that there are reasons led to the incident. It is axiomatic that every driver knows the traffic safety elements of three of the driver, the vehicle, the road and the surrounding circumstances, they are learning alphabets of road users when they start the first step in driving any vehicle. Incidents of traffic remains a complex phenomenon in the installation and is made up of several elements directly affect them or indirectly, And makes them a problem in the end impose themselves on the different communities and affect the progress as a result of the failure of one or all of the traffic in turn fully.

If we look at all serious analytical causes of accidents, whether human error was caused by the driver or geometric errors were caused by the road, or mechanical errors were caused by the car, all these causes can be identified as direct causes and indirect causes.

#### 9-1- direct causes

The determination of the causes of the accident minutes how to actually requires action professionally and professionally ranging from costly interests to investigate the incidents to the characteristics and peculiarities that require the road network, despite the multiplicity of causes and diversity, but the basic due back to the human being as perceived and able to adapt to all conditions and in all cases. In this area, most countries stated that between 80% to 90% of traffic accidents due to the human factor, while that between 10% to only 20% attributed to the state of the environment and the way or to the circumstances of the car. According to statistics of traffic accidents in Algeria, issued by the National Center for the Prevention and security across the road set out in Table 2, the human factor is the main culprit in traffic accidents. In 2012 the human element in the incidence of traffic accidents increased by 90.6% of the total contributed to the causes of traffic accidents, and occupied the reasons for the status of the vehicle ranked second by 5.1% and causes the ocean by 4.3% of the causes.

Reason	The year						
	2005		2008		2012		
	Repetition	Ratio	Repetition	Ratio	Repetition	Ratio	
The human factor	34906	89.0	36199	89.4	38500	90.6	
Vehicle	2233	5.7	2702	6.7	2162	5.1	
Ocean	2094	5.3	1580	3.9	1815	4.3	
Total	39233	100.0	40481	100.0	42477	100.0	
Source: National Center for the Prevention and security across the roads.							

Table 2: Distribution of traffic accidents by cause (%) for the years 2005.2008 and 2012

One of the reasons related to the human factor are: excessive speed, serious abuses, lack of use of pedestrian corridors, lack of respect for the legal security distance, dangerous maneuvers, losing control of the vehicle and others. The reasons associated with the vehicle in the tire burst, the mechanical imbalances, Brake ineffective, overloading or unlocked, the lack of lights and others. The reasons for the road and the ocean is the lack of validity of the parts of the road, the lack of lighting and signals, bad weather, road and other abnormalities.

**9.2 Indirect causes**: After we dealt with the immediate causes of the occurrence of traffic accidents we will tackle the indirect causes of the latter, which are shown off as follows:

- Lack of knowledge assets driving: The driver's main axis around which traffic accidents, has been shown by previous statistics that more than 90% of these accidents occur because the driver, as the leadership of the composite art form has its origins and knowledge of the rules, so we find a lot of accidents due to the failure to follow the driver of the assets of the leadership or lack of familiarity with the rules and ethics of traffic, such as the meaning the light signals and land lines, in addition to serious abuses without taking into account the terms of overtaking and lack of respect for precedence in traffic and not to leave the priority, This is due to the ineffectiveness of the system the configuration and training on driving. One manifestation of the interest of some countries to rehabilitate the drivers it requires to get a driver's license traverse prepared for it and undergo a training course in one of the schools teach driving supervised by specialists affairs training and education, testing, and require some systems to test myself to applicants wishing to obtain a public driving permit.
- Lack of knowledge about the nature of the vehicle: Today the car has become a source of threat to the safety of others, whether they are pedestrians or passengers, as a result of misuse or ignorance of each element of the vehicle elements, since under the car of neglect, or lack of maintenance standards, as most drivers do not observe their cars except in the case of damage to it, and in some cases damage prevents her from walking, and this means that there is a class of drivers lack the application of preventive maintenance required for their vehicles standards, change some of the components within walking a certain distance or a specified period (Hamad Suleiman Alhoied, Riyadh 0.1998, p. 56).
- **The inability to driving**: The driver may be familiar with the origins of the leadership, but he can not multidriving his car for reasons securely provide him and other safety Among these reasons, the driver infection limits the efficiency of leadership, and therefore paid legislation particular attention to the health status of drivers is a must when apply for a driver's license for the first time a medical examination.

- Lack of awareness of operations: Given the importance of awareness of operations and the effective and positive role in achieving safety and security of traffic, but we believe that it is self-evident that all actions concerning awareness in this area can not be effective unless placed in the context of a strategy well thought out, and attached to complementary measures in the areas of other.
- Age and experience: often the driver elderly find it difficult in the rapid reaction process during the appearance of danger as a result of the weakness of the synergies perception that at least with the progress of the individual's age, and the same thing for the young, as the main characteristics have is apathy and lack of respect for traffic laws.
- Mental preoccupation: The distracted while driving, even for a few moments will entail an accident, because it leads to a weakening of vigilance that must be characterized by the driver, on which depends the reaction when you see it at risk or trying to avoid. To do so, the driver should focus its attention while driving, taking into account traffic and road condition and attentive to what is going on and what is likely to happen of surprises, especially during the night.
- Alcohol and drug abuse and sedative drugs: Scientific experiments have shown that the driver who is under the influence of alcohol the reaction is slow and has diminished he has the ability to clear vision, and less ability to pay attention is required while driving. Also, some drugs abuse increases the risk of accidents, and the direct or indirect impact on the neural activity can occur some tranquilizers shortage or reduction in motor coordination, slow speed in reaction, a lack of reflection time, a lack of caution, Inconsistency of information and a lack of memory, and the individual remains the only person who can control the use of these sedatives.
- Feel quite overwhelming: This is a race among the reasons that lead to the commission of traffic accidents while driving.
- Do not use a seat belt: the seat belt is considered one of the most effective measures to ensure the safety while driving, since the imposition of the seat belt can reduce deaths from traffic accidents by between 20% and 25%, and confirmed the study published in the British journal that the use of seat belt It reduces the risk of injury by 65% (Cummings P et al, 2002, p 20). The lack of use of the helmet for riders of motorcycles increases the risk of traffic accidents committed.
- The use of mobile phones while driving: popped mobile phones as one of the problems that threaten traffic safety, has indicated the research carried out in this context to an increase in the time it takes the driver to react if talking on a mobile phone, as well as the difficulty of maintaining the car in a proper conduct or at the appropriate speed and lack of attention to the gaps in the road and realize their gravity, and the mobile acted driver for traffic control, and prohibits its use is currently in various countries around the world (world Health Organization, Geneva, 2004, p. 34).
- Negative phenomena: and is the selfishness of the driver who believes that the road belongs to him and that does not take account of his rights, and the driver, who is characterized as such shows impatience speed and the use of the alarm clock on an ongoing basis, as well as the driver's quick to anger and ostentatious which displays road users at risk of attract attention to him. In order to eliminate these phenomena must be the embodiment of mutual respect between drivers and pedestrians and raise the level of maturity among individuals, Until the elimination of selfishness and self-love, as it should be applied to traffic laws firm and friendly manner at the same time, through the concept of perception "that the traffic system to protect you, not to harass you" (Alfarsi Fouad, 1990, p. 17).
- Imbalances between the size of a barn capacity vehicles and grassroots structures: The increase in demand for transport leads by extension to the direction of the complexity of transport problems and then decline in the level of service. Increasing car ownership to meet the growing needs of transport leads to the complexity of the problems of traffic, and interview the latter is through the provision of facilities and means of the largest traffic and the development of appropriate scientific organizations to control traffic. The national barn for vehicles in Algeria are important because of the number reached by the year 2012, Where the vehicle was estimated at 7,308,612 after the vehicle was 2,947,517 in 2000. With no roads network this increase in the number of vehicles keep pace with, and became congestion and overcrowding cause of accidents.
- A lack of grassroots structures used to walk: Includes all basal facilities used for the flow of vehicle, whether it is the road itself or equipment relating to its vertical and horizontal signals, sidewalks, walkways protected, public lighting and others.

Therefore, the projects create new ways must be implemented according to the degree of development and studies reached by the traffic regulation in order to ensure protection and security incidents, as well as take into account the shortcomings of existing roads.

# 10. Site between Algeria and other countries in the field of traffic accidents

It's easy now compared to the problem of traffic accidents between the various countries of the world, due to the presence of international organizations, such as the World Road Authority and the World Health Organization, both published statistics relating to road accident involving most of the world, in addition to studies and international research published global and specialist periodicals. But in Hedda framework must take into account the concepts used in this area and knead for several reasons, including:

- Registration of traffic accidents from one country to another method is different, there are countries that do not record minor incidents within the statistics.
- Definition of deaths resulting from traffic accidents from country to country varies, with some countries defined as death at the accident site only, and there are countries the case of the injured even death in the hospital following the course of treatment for a period of a week or two weeks or a month, or may be long about it.
- Some countries, traffic accidents are classified according to their severity, such as light to moderate and severe injuries and deaths accidents, but they are recorded incidents of minor injuries with minor incidents.

We will perform compared to the problem of traffic accidents in Algeria with some developed countries and the Arab countries in the year 2007, taking into account the differences mentioned in order to get a general indicators and accurate results.

# 10.1 The status of Algeria among the advanced countries in the field of traffic accidents

Conducted often comparative studies in order to identify the situation in a particular area, compared with the same situation in other countries, because it allows assessment of the situation and to extrapolate the most effective policies to deal with it. Hence, we will perform comparisons on the various elements of traffic accidents between Algeria and other countries in order to explore a gap the size of the dispute, and to know the status of traffic accidents in the internal politics of each country, using the data of the National Center for the Prevention and security across the roads for the year 2007.

Seen through the Table 3 data that the United States ranked first in terms of number of deaths resulting from traffic accidents recorded 42,642 dead and then we find Russia and Mexico in the second and third places have recorded 35 672 and 22 103 deaths in a row, and then comes all from Italy, Germany, France and find in last place Algeria recorded 4177 people.

United States of America	12612		
	42642	139	170
Russia	35972	252	930
Mexico	22103	207	885
Italia	5669	96	131
Germany	4949	60	89
France	4620	75	116
Algeria	4177	121	775
] [	Mexico Italia Germany France Algeria	Mexico       22103         Italia       5669         Germany       4949         France       4620         Algeria       4177	Mexico     22103     207       Italia     5669     96       Germany     4949     60       France     4620     75

Table 3: traffic accidents in Algeria and the developed countries indicators for the year 2007

As for the average number of deaths per million vehicles, we note that Algeria ranked fourth's teacher 121 people per million vehicles, after Russia, Mexico and the United States of America registered by respectively 252 207 and 139 deaths per million vehicles. Came from France, Germany and Italy registered by 75.60 and 96 deaths per million vehicles respectively, and despite the fact that Algeria has a 9% is owned by Germany of vehicles and 13.4% is owned by France and 12.4% is owned by Italy (Alaa Abdel Rahman Youssef Bakri, 1997, p. 28). This may be due to the experience of these countries in the field of traffic safety and the method of dealing with the problem of accidents, as well as the development of emergency medical services there.

In regard to the number of deaths per million inhabitants index, Seen through the data table that Algeria was ranked third at a rate of 775 deaths per million inhabitants, after both Russia and Mexico, while came the order of the rest of the European countries and the United States after Algeria and rates mixed, noting that The population of Algeria represents a rate of 41.6% of Germany's population and 55.8% of the population of France. Despite all that Algeria occupies the worst position compared with the developed countries in terms of the average number of deaths resulting from traffic accidents.

# 10.2 The status of Algeria between the Arab states and the Morocco countries in the field of traffic accidents

## 10-2-1- compared to Arab countries Algeria

Having learned about the site Algeria between some developed countries in the field of traffic accidents, we will perform comparison between Algeria and some Arab countries about some of the elements of traffic accidents, in order to know the location Algeria between these countries.

The Dead / m Death number of Dead m Ranking Country population toll vehicles vehicle inhabitants Egypt Saudi Arabia Algeria Morocco Syria Yemen Sudan Libya Iraq Tunisia United Arab **Emirates** Jordan Oman Lebanon Kuwait Mauritania Qatar Palestine Bahrain Source: National Center for the Prevention and security across the roads for the year 2007.

Table 4: traffic accidents in Algeria and the Arab countries indicators for the year 2007

Observe by Table 4 data that Algeria belong to the top five which occupies third among Arab countries in terms of the death toll for the year 2007, where the state of Egypt-based sister topping the number of dead reached 15,983 people, an average of 43 people per day and the Kingdom of Saudi Arabia ranked second with a total 6358 dead people reached an average of 16 people a day, and in third place we find Algeria with a total death toll reached 4177 people, an average of 16 people a day. In the last two ranked find both Palestine and Bahrain, the number of dead reached 188 and 91 people respectively.

Regarding the number of deaths per million vehicle index as a result of traffic accidents, we note that Yemen is ranked first in the number of deaths amounted to 3861 deaths per million vehicles, despite the possession of 777,734 vehicles, followed by Egypt at about 3717 people per million vehicle then Syria by about 2636 people per million vehicle. As Algeria possessing 5386726 vehicle, it occupies the last rank at a rate of 775 deaths per million vehicles compared with these countries, with the knowledge that Algeria occupies the second place in terms of possession Vehicles after Saudi Arabia, which owns 7398600 vehicle, while the State of Kuwait occupies last place recorded 238 deaths per million vehicles.

With regard to number of deaths per million inhabitants index, we note from the table that Libya occupies the first place recorded 347 dead, Data, and then Amman in second status by about 307 deaths per million inhabitants, then we find in third status Saudi Arabia recorded 257 deaths per million inhabitants, and then we find United Arab Emirates and Qatar in the fourth and fifth status about 241 and 237 deaths per million inhabitants, respectively. While we find Algeria in recent mattresses recorded 121 deaths per million inhabitants, and in the last place we find Palestine where he recorded 47 deaths per million inhabitants.

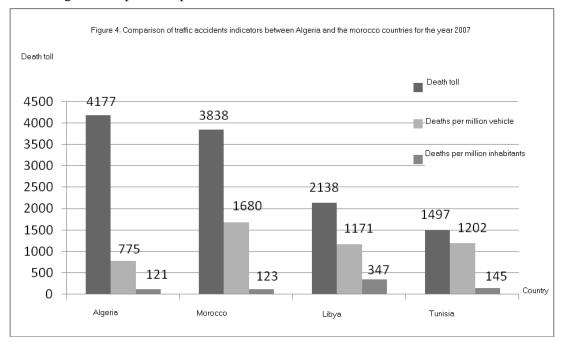
## 10-2-2- compared Morocco countries with Algeria

Observe through the data in Table 5 that Algeria was ranked first among the morocco countries in terms of the death toll from traffic accidents, where 4177 people recorded an average of 11 people a day, and then followed by the Kingdom of Morocco in second status recorded 3838 people, an average of 10 deaths per day, and in the third place we find Libya recorded in 2138 and killed in the fourth and last place we find Tunisia recorded in 1497 and killed an average of four deaths per day.

Ranking	Country	Death toll	The number of vehicles	population	Dead / m vehicle	Dead / m inhabitants	
1	Algeria	4177	5386726	34800000	775	121	
2	Morocco	3838	2284060	31224137	1680	123	
3	Libya	2138	1826533	6160488	1171	347	
4	Tunisia	1497	1244918	10327285	1202	145	
Source: N	Source: National Center for the Prevention and security across the roads for the year 2007.						

Table 5: traffic accidents Arab morocco countries indicators for the year 2007

In Figure 4 shows clearly the gap between the four countries of the morocco in the field of traffic accidents indicators where Algeria occupies first place in the number of deaths.



Source: prepared by the researcher based on data from the National Center for the Prevention and security across the roads

Regarding the number of deaths per million vehicle index, the Kingdom of Morocco was ranked first recorded 1680 deaths per million vehicles, followed by Tunisia, about 1202 people per million vehicle then Libya recorded 1171 deaths per million vehicle occupied Algeria ranked last recorded 775 deaths per million vehicle, despite the fact that Algeria has a number of compounds (5386726) equivalent to twice what is owned by the Kingdom of Morocco (2284060).

Regarding the number of deaths per million inhabitants index data table shows that the first place due to Libya recorded 347 deaths per million inhabitants, followed by Tunisia, about 145 people dead and the Kingdom of Morocco have recorded 123 people dead, and in the last place we find Algeria recorded 121 deaths per million people, despite the occupation of the first rank in terms of population.

## \* Conclusions and Recommendations

The phenomenon of traffic accidents remain a serious problem threatening the life of Algerian society of the dead and wounded, in addition to material losses that result from them, and thus represents one of the most important impediments to the development process, where lies the danger of this phenomenon as have on the individual and society from several effects, including economic, social and psychological.

Statistics showed traffic accidents in Algeria, issued by the National Center for the Prevention and security across the roads that the number of traffic accidents has seen great development during the period 1970-2010, and is the human factor It is the main reason why they happen through his wrong behavior, along with other factors such as vehicle and the road and the ocean and others. In this regard, we can say that the determination of the leading causes of traffic accidents minutes how to actually requires action professionally and professionally ranging from costly interests to investigate the incidents to the characteristics and peculiarities that require the road network.

The show received indications average number of deaths per million inhabitants, and the average number of deaths per million vehicle dangerous incidents committed, ES These indicators counterpart in some developed countries and the Arab countries in 2007.

To mitigate this phenomenon must strengthen awareness campaigns and eliminate all objected to facilitate the traffic, and the expansion of the road network and education of tags necessary to do so, and impose strict penalties on anyone who violates the law stipulated, ie has to be the elimination of all the problems that hinder traffic safety, to achieve this you should work on:

- Attention to the inclusion of material traffic education in school curricula;
- Search serious and permanent traffic in the field of information as well as the specialization of roles and full readiness to broadcast information to show the seriousness of the traffic as it stems from the behaviors in violation of traffic law embodied by all segments of society;
- Strict application of deterrent measures prescribed by law;
- The elimination of illegal operations to obtain driver's licenses and the strict prevention;
- The expansion of road networks inside and outside the cities.
- Road repairs and processing of tags and optical signals according to international standards and specifications;
- Creation of corridors ground pedestrian in the points where frequent traffic;
- The establishment of a higher council for passage includes representatives from the ministries of interior, transportation, education, the media, the judiciary and health be his task to develop solutions to the problem of traffic and the prevention of road accidents and mitigation of harmful;
- The introduction of new management to analyze statistics and data traffic accidents to determine their causes and identify places where repeated and work on finding solutions.

# References

Abdul Aziz,Bin Mohsen.Mohammed.Subhi.(1968).the social impacts of traffic accidents in Saudi Arabia, Master dissertation, Riyadh, p. 29.

Al-Bakri, Alaa. Abdel-Rahman. Youssef. (1997). a reference in Traffic Safety, Riyadh, Saudi Arabia, P. 28.

ALfarsi, Fouad. (1990). modernity and tradition, London.

Asiri, Yasser. Abdullah., et al. (2009). Motor vehicle accidents in the city of Riyadh, King Saud University, Saudi Arabia.

Commission économique pour l'Europe.(1998).statistique des accidents de la circulation routière en Europe et en Amérique du nord, Nations Unies, New York, Vol.43, P.133.

Cummings Peter et al.(2002). Association of driver air bags with driver fatality In British medical journal, N°324. Hamad, Suleiman Alhoeid. (1998). organized crime and ways to combat them, Knowledge House, Riyadh, Saudi Arabia.

Ministère des Transports.(1974). Recueil des termes du transport terrestre, Dictionnaire de transport, Algérie.

Saleh, Abdul Rahim. Hassan., et al. (2002). "Traffic problems: the driving forces behind the traffic problems," the seminar twelfth: traffic accidents in the societies of the Gulf Cooperation Council (GCC) - Dimensions psychological, social and Alterbuah, Kuwait.

Soalehi, Rabia. (2000). the world choked, in the prevention and motoring magazine, the National Center for the Prevention and security across the road, No. 2, Algeria.

Taima, Yusuf. Ahmed. (1990). search in the analysis of car accidents highway, factoring, the causes of reduction, the Police Academy of the Arab Republic of Egypt, p. 7.

World Health Organization. (2004). World Report on prevention of injuries caused by traffic accidents, Geneva.