



ROAD

CRASH

AND CLAIMS REPORT

2016

The title "ROAD CRASH AND CLAIMS REPORT" is displayed prominently in the center. The word "ROAD" is in a smaller, dark font on the left. The word "CRASH" is in a large, bold, dark font with a cracked, shattered texture. Below it, "AND CLAIMS REPORT" is in a dark font. In the bottom right corner of the title area, the year "2016" is written vertically in yellow.

MVA Fund

The Motor Vehicle Accident Fund of Namibia

Driven to lend a helping hand!

About Us

The Motor Vehicle Accident Fund of Namibia is mandated to design, promote and implement crash and injury prevention measures, and provides assistance and benefits to all people injured and the dependents of those killed in motor vehicle crashes in accordance with the MVA Fund Act No. 10 of 2007.

The Fund operates on a hybrid system where all people injured in motor vehicle crashes, regardless of who caused the crash, receive fair and reasonable benefits (subject to some limitations and exclusions) where payments are done in accordance with administrative law principles.

Historically, the Fund was established in 1994 in terms of Act 30 of 1990 shortly after independence, to compensate people injured in motor vehicle crashes or the dependents of people killed in such crashes. It was then a “fault-based” system where compensation was paid as a result of negligence or any other unlawful act on the part of the driver.

VISION - Supporting your journey to independence.

MISSION - To empower our customers through tailored injury prevention programmes and support for their return to meaningful life.

VALUES - Passion
Excellence
Teamwork
Integrity

EDITORIAL INPUT - The MVA Fund wishes to acknowledge the input of Associate Professor Michael Fitzharris of the Monash University Accident Research Centre for providing editorial input for this report.



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Acronyms

A & IP
CC
CoW
MVA FUND
Nampol
NRSC
IRDAT
PE
PSRSF
RA
SDG
UNICEF
WPRS
SCI
TBI

Accident and Injury Prevention
Closed Corporation
City of Windhoek
Motor Vehicle Accident Fund
Namibian Police
National Road Safety Council
International Traffic Safety Data and Analysis Group
Public Education
Private Sector Road Safety Forum
Roads Authority
Sustainable Development Goals
United Nations Children's Fund
Work Place Road Safety
Spinal Cord Injury
Traumatic Brain Injury



Summary

Even though Namibia continues to experience a high number of road traffic crashes, a slight reduction was observed during 2016. Reported crashes in 2016 have shown a slight reduction in crashes and injuries by 4% and 10% respectively as compared to 2015. However, fatalities increased with 2% for the year under review. This is not worth celebrating as the reduction in crashes and injuries has been minimal, and in fact has increased since 2011. This is of concern as the Sustainable Development Goal (SDG) 3.2 target is to reduce global road traffic deaths and injuries by 50% by the year 2020. Therefore, more effort is needed from both the private and public sectors to reach this target. Teamwork needs to be strengthened for the Decade of Action objectives to be fulfilled as noted by the World Health Organization.

Analysis indicate that there was a slight reduction (4%) in road crashes during the year 2016 as compared to the previous year. This is a positive outcome as compared to the previous increase of 4% during 2015 in relation to 2014. Overall, across the previous six year period, an average of 3,875 crashes occurred on Namibian roads per annum.

Findings further indicate that all regions record road crashes in Namibia, of which, most occurred in the Khomas (39%) followed by Erongo (12%), Otjozondjupa (10%) and Oshana (9%) respectively. The main types of crashes that occurred during 2016 were rollovers (29%), collisions (28%) and crashes involving pedestrians (22%). Pedestrian related crashes were high in Khomas region (53%) followed by Oshana (11%), Erongo (10%) and Kavango (East & West) (5%). Rollover crashes were mostly prevalent in Khomas (18%), Otjozondjupa (16%), Erongo (15%) and Hardap (8%) regions.

Statistics further demonstrate that weekends represent the highest road risk period, with 53% of the crashes recorded in 2016 occurring during Fridays through to Sundays. Driving at night has been a growing concern in Namibia, with a total of 46% of all recorded crashes occurring between 16H00–23H59 hours.

Regarding the types of vehicles involved in crashes during 2016, most were sedans (48%) and pick-ups (31%), while most of the crash-involved vehicles were registered for private use (68%), 13% were public transport vehicles.

Injuries per year decreased during 2016 by 10% as compared to the previous year. On average, 6,685 injured persons are recorded annually. The 2016 crash statistics suggest that the injury rate in motor vehicle crashes is 321.2 injured persons per 100,000 population.

The regions with the highest number of recorded crashes also recorded the highest number of injuries, which were: Khomas (33%), followed by Erongo and Otjozondjupa with 11% and then Oshana (8%). In 2016 alone, there was an average of 566 persons injured in crashes every month.

Regarding pedestrian crashes, a slight decrease by 1% was observed between 2015 and 2016, and on average 1,115 pedestrian crashes are recorded on Namibia's roads annually. Most of the pedestrian related crashes occurred in Khomas region (53%), followed by Oshana and Erongo with 11% and 10% respectively. Pedestrian crashes claimed 190 lives, representing 26% of the total recorded fatalities during 2016. In relation to roll-over crashes, a 3% reduction was observed during 2016 in comparison to the previous year. The Khomas region recorded 18% of all rollovers nationally, followed by Otjozondjupa (16%), Erongo (15%) and Hardap with 8%. On average 1,230 roll-over crashes are recorded yearly.

Young people between the ages of 16 to 35 years represented 48% of persons injured and 44% of persons killed in Namibia. Nearly two-thirds (64%) of persons injured and 72% of those killed in Namibia were male. Further analysis on casualty statistics indicate that the majority of persons injured in road crashes were passengers (58%) followed by drivers (24%).

Furthermore, passengers accounted for 46% of persons killed in road crashes in 2016, followed by pedestrians, who accounted for 26%. Two-thirds of people died at the scene of the crash (69%) and 22% died in hospital.

Fatalities due to road crashes during 2016 increased by 2% from those reported in 2015. On average, 647 deaths are recorded on Namibia's roads annually. The findings of this report illustrate an exposure rate of 34.6 deaths per 100,000 population during 2016. The months of December (12%) and June (11%) represented the most problematic months. The regions with the highest number of fatalities were Khomas (15%) and Otjozondjupa (11%).



Benefit claims offered by the Fund decreased by 3% from 2015 to 2016. On average, a total of 3,506 benefit claims are lodged with the Fund, per annum. The months of June (10%), September (10%) and July (9%) saw many claims lodged. Most of these claims lodged were Injury Grant (71%), followed by claims in respect of Funeral Grants (20%) and Loss of Support (5%). A large proportion of claims were submitted and processed at the Windhoek Service Centre (44%), followed by those lodged at Ongwediva (29%) and Walvis Bay (7%) service centres. Notably, a total of 75 benefit claims were repudiated during the year 2016, of which 33% were lodged by unlicensed drivers, 29% were submitted after the prescribed date, 8% of the claimants were illegal immigrants and an additional 8% were claiming for non-motor vehicle accidents.

With respect to Medical Service Providers, a total of 26,113 claims were received during 2016, indicating an increase by 6% from 2015. With these claims, a total of N\$ 169,757,231.98 claimed amount was processed, which indicates an increase of 17% from the recorded N\$ 145,096,746.95 claimed in 2015.



Section 1: Background



1.1 Introduction

According to the International Traffic Safety Data and Analysis group (IRTAD, 2016) each year, more than 1.2 million people die in crashes on the world's roads and millions more are seriously injured. Without action, road traffic crashes are predicted to rise to the 7th leading cause of death in the world by 2030.

Road traffic injuries cause considerable economic losses to injured persons, families of those killed and the whole nation. These losses arise from the cost of medical treatment (including rehabilitation) as well as loss of productivity for those killed or disabled by injuries, and for family members who need to take time off work or school to care for the injured.

Taking effective action to reduce this unacceptable toll begins with establishing and reporting reliable data depicting the extent of the problem. From this, the effectiveness of road safety policies and practices in the country can be determined. In turn, this provides a means to identify opportunities to further develop and strengthen road safety policy and practice.

In April 2016, the UN General Assembly in resolution 70/260 confirmed the Sustainable Development Goals (SDG) road safety targets. SDG 3.2 aspires to reduce global road traffic deaths and injuries by 50% by the year 2020, compared to the 2010 data.

In addition, SDG 11.2 calls to "provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations e.g. women, children, persons with disabilities and older persons" by 2030. These aspirations defined by the SDGs require countries to intensify their efforts in coordinated road safety actions. Part of that effort will be strengthening capacity to collect and analyze road safety data that will guide strategic interventions.

Following from above, this report thus provides an in-depth analysis of the 2016 road crash statistics, as collected and collated throughout the country by the Motor Vehicle Accident (MVA) Fund of Namibia Call Centre.

The analysis focuses on understanding the regional distribution of crashes, injuries and fatalities as well as contributory factors for crashes.

Crashes are further analyzed by days of the week and time of day, while casualty data is further documented by gender, age and road user category.

Particular emphasis is put on pedestrians, roll-over crashes and collisions as these are the common crash types in Namibia. In addition to the above, the report provides an analysis of the Fund's benefit claims that were lodged during the year 2016.

The aim of this report is to document and monitor road crash trends in Namibia as it relates to crashes that involve injuries and deaths. The findings of the report can be used to measure effectiveness of interventions in part, guide policy considerations, strategic decision making and also serve as a historical crash data source.

1.2 Data Collection Methods

The main source of data is the MVA Fund Call Centre, where crashes are reported, through the toll-free Accident Response Number 0819682. Information collected and recorded by the Call Centre is verified with the Namibian Police, Emergency Medical Rescue Services and Health Officials from public and private hospitals throughout the country. Since 2009, the Fund has adopted the World Health Organization (WHO) method of recording road deaths, aligning to its standard definition of road fatality as "any person killed immediately or dying within 30 days as a result of a road crash" (WHO, 2013).

By adopting the WHO international standard of reporting of road crashes, comparability with other countries is achieved. It should be noted that the MVA Fund only records statistics from crashes that resulted in injuries and/or fatalities.

Crashes that resulted in property damages only are duly excluded in the data presented in this report. The data presented in this report was stored on the MVA Fund crash and claim management system (Siebel) and was analyzed using Microsoft Excel Software.



1.3 Objectives

This report has three objectives, these being:

1. To provide a comprehensive comparison of injury related road traffic crashes in Namibia for 2015 and 2016.
2. To provide an in-depth analysis of the MVA Fund claims data for the year 2016.
3. To suggest evidence-based approaches and interventions to reduce road traffic crashes, injuries and fatalities.

Table 1: Quick facts about the 2015 and 2016 crash statistics

Crash Outcome	2015	2016
Crashes	4309	4134
Fatalities	718	731
Injuries	7527	6795
Casualties	8245	7526
MVA Fund Claims	3651	3526
Reference Data		
Vehicle Population	353,805†	371,281†
Namibia Population	2,113,017‡	2,113,017‡
Indicators		
Fatalities per 10,000 vehicles	20.3	19.7
Fatalities per 100,000 Persons	34.0	34.6
Injuries per 10,000 vehicles	212.7	183.0
Injuries per 100,000 Persons	356.2	321.6
Casualties per 10,000 vehicles	233.0	202.7
Casualties per 100,000 persons	390.2	356.2
Fatalities per crash	0.2	0.2
Injuries per crash	1.7	1.6
Casualties per crash	1.9	1.8
Crashes for 1 fatality	6.0	5.7

† Population (vehicles), Roads Authority – Vehicle Statistics, December 2016

‡ Population (persons), Namibia Population & Housing Census Report 2011



Section 2: Crashes



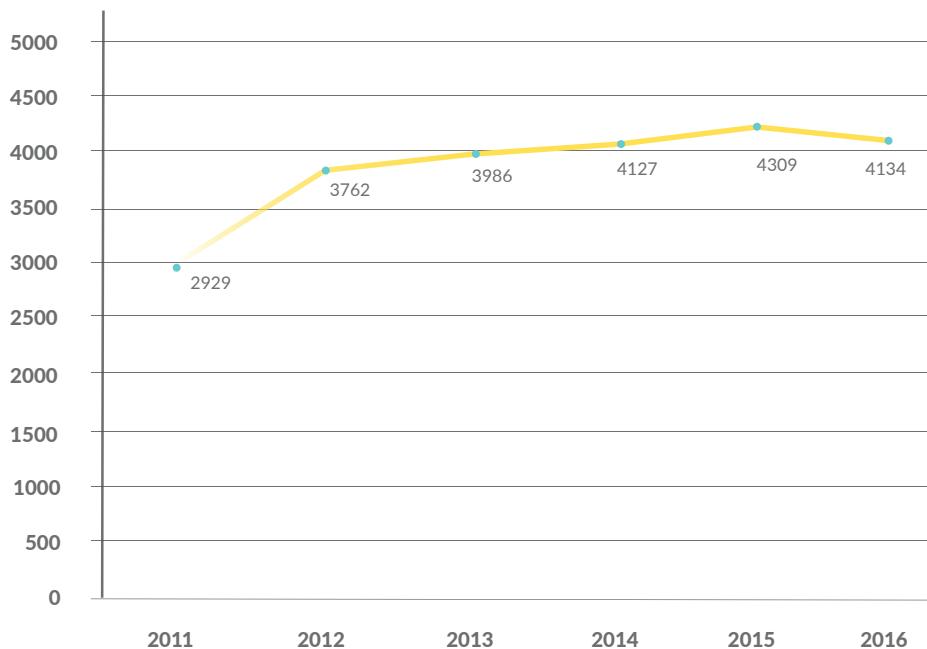
2.1 Introduction

This section provides an analysis of the recorded road crashes for the year 2016 in comparison to 2015. The analysis presents crash trends over the past six years, crashes per month and region, the types of crashes as well as the distribution of crashes by day of the week and time of day. Another valuable analysis of this section is that of the information about vehicles involved in crashes.

2.2 Annual Crashes

The year 2016 witnessed a 4% reduction in road crashes compared to 2015, as shown in Figure 1 below. This is an important finding as data from 2011 to 2015 demonstrate an increasing trend of road crashes in Namibia. Specifically, the number of recorded road crashes increased by 28% from 2011 to 2012, and a further 6% increase was observed from 2012 to 2013. A slight increase of 4% was again recorded from 2013 to 2014 and from 2014 to 2015. Overall, the statistics indicate an average of 3875 crashes recorded per annum.

Figure 1: Road crash trend (2011-2016)



2.3 Crashes Per Month

In 2016, an average of 345 crashes were recorded per month in Namibia. Most of these crashes were recorded during months with public holidays such as March, April, July, August and December, each with more than 8.9% of the total crashes. December 2016 recorded the highest number of crashes in 6 years. Table 2 below further shows that the month of November had the lowest number of crashes (6.4%)

Table 2: Crashes per month (2011-2016)

Months	2011	2012	2013	2014	2015	2016						
Jan	210	7.2%	337	9.0%	325	8.2%	360	8.7%	320	7.4%	311	7.5%
Feb	401	13.7%	326	8.7%	310	7.8%	344	8.3%	307	7.1%	289	7.0%
Mar	278	9.5%	308	8.2%	377	9.5%	348	8.4%	392	9.1%	378	9.1%
Apr	147	5.0%	334	8.9%	324	8.1%	323	7.8%	353	8.2%	397	9.6%
May	164	5.6%	284	7.5%	315	7.9%	375	9.1%	360	8.4%	332	8.0%
Jun	219	7.5%	306	8.1%	305	7.7%	340	8.2%	350	8.1%	335	8.1%
Jul	206	7.0%	320	8.5%	403	10.1%	321	7.8%	367	8.5%	397	9.6%
Aug	189	6.5%	319	8.5%	351	8.8%	382	9.3%	401	9.3%	369	8.9%
Sept	294	10.0%	316	8.4%	335	8.4%	278	6.7%	332	7.7%	331	8.0%
Oct	252	8.6%	313	8.3%	287	7.2%	312	7.6%	383	8.9%	322	7.8%
Nov	256	8.7%	259	6.9%	317	8.0%	372	9.0%	354	8.2%	263	6.4%
Dec	313	10.7%	340	9.0%	337	8.5%	372	9.0%	390	9.1%	410	10.0%
Total	2929	100%	3762	100%	3986	100%	4127	100%	4309	100%	4134	100%

2.4 Crashes Per Region

Figure 2 shows the geographic distribution of recorded crashes per region for 2015 and 2016. The five regions with the highest number of crashes remained the same for both years. As indicated below, for 2016, most of the crashes were recorded in the Khomas (39%), Erongo (12%), Otjozondjupa (10%), Oshana (9%) and Oshikoto region (6%). As can be seen in the same figure, most of the recorded road crashes occurred in the regions with the largest cities/towns in Namibia.

Additionally, statistics provided by the Roads Authority (see Appendix A) indicate that the largest number of registered vehicles during the year 2016 were recorded in the following towns: Windhoek (Khomas region; 165,636 or 45%), Oshakati (Oshana region; 30,005 or 8%), Walvis Bay (Erongo region; 22,011 or 6%) and Swakopmund (Erongo region; 20,999 or 6%).



In all regions, the number of crashes reduced except for Kunene.

Figure 2: Crashes per region (2015 & 2016)

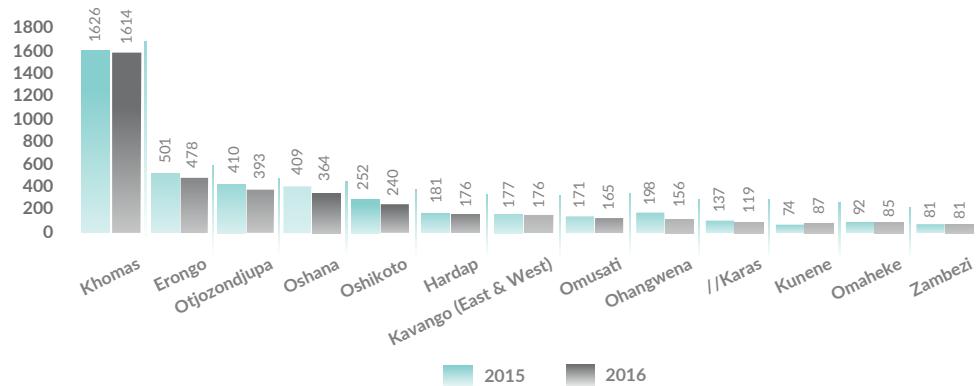


Table 3 below indicates the population per region (as per the 2011 Population and Housing Census), as well as the number of casualties recorded in each region during 2016. Khomas region has the largest proportion of the Namibian population (342,141) as well as the highest number of casualties (2,371) for the year 2016.

The region with the smallest population is Omaheke (71,233), while the region that recorded the least number of casualties (123) is Zambezi with a population of (90,536).

Table 3: Population and casualties per region (2016)

Region	Population	Casualties	Casualties per 100,000 persons
Khomas	342,141	2371	692.99
Otjozondjupa	143,903	840	583.73
Erongo	150,809	831	551.03
Oshana	176,674	618	349.80
Oshikoto	181,973	550	302.24
Hardap	79,507	446	560.96
Omusati	243,166	408	167.79
//Karas	77,421	338	436.57
Changwena	245,446	298	121.41
Kavango (East & West)	223,352	293	131.18
Kunene	86,856	226	260.20
Omaheke	71,233	184	258.31
Zambezi	90,536	123	135.86
Total	2,113,017	7526	356.17

2.5 Types Of Crashes

As indicated in Table 4, during 2015 the leading crash types were roll-over crashes (29%) followed by collisions (28%). Similarly in 2016, roll-over crashes remained the dominant type of crash (29%), followed by collisions (27%), and crashes involving pedestrians (23%). Roll-over crashes are attributable to speed, alcohol, fatigue and/or wet weather conditions. A detailed analysis of roll-over crashes is provided in Section 6 of this report.

Crash investigators have linked collisions to speed, inadequate following distance, inconsiderate overtaking, non-compliance with traffic light signals and driving while under the influence of alcohol. Crashes involving pedestrians, on the other hand, may occur as a result of lack of road safety measures, speeding, alcohol consumption and failure to use designated pedestrian crossings, among other factors.



In addition to the above, it is important to note as per figures in the table below, that animal-related crashes as well as cyclists are also a concern in Namibia as no provision is made for non-motorized transport.

Types of crashes	2015		2016	
	Actuals	Percentages	Actuals	Percentage
Roll-overs	1250	29%	1210	29%
Collisions	1202	28%	1113	27%
Pedestrians	928	22%	931	23%
Hit and run	218	5%	199	5%
Cyclists	155	4%	117	3%
Fixed objects	144	3%	146	4%
Animals	142	3%	140	3%
Under investigation	119	3%	148	4%
Fell/jumped from moving vehicle	99	2%	79	2%
Tyre burst	37	1%	37	1%
Mechanical failures	8	0%	11	0%
Collision with train	7	0%	3	0%
Total	4309	100%	4134	100%

2.6 Types Of Crashes Per Region

The distribution of crash types across the regions for 2016 is displayed in Table 5 below. Regarding pedestrian-involved crashes, most were recorded in the Khomas region (53%) which accommodates 16% of the total population, followed by Oshana region (11% and 8% of the total population), Erongo region (10% and 7% of the total population) and Kavango (East & West) regions (5% and 10% of the total population).

For collisions, the majority of crashes occurred in the Khomas region (54%), followed by the Erongo and Oshana regions with 10% each, and followed by the Otjozondjupa region (6%). In addition, Khomas (18%), Otjozondjupa (16%), Erongo (15%), and Hardap (8%) region recorded the highest number of roll-over crashes during 2016.

The number of crashes involving cyclists were also highest in the Khomas (37%), Erongo (18%) and Zambezi (9%) and Oshana (8%) regions, while most of the animal related crashes occurred in the Otjozondjupa (30%), Oshikoto (12%) and Hardap (9%) regions.

With regard to region specific crash types, roll-over crashes were the most common in almost all the regions, except for Khomas, Oshana and Kavango (East & West), which were dominated by pedestrian related crashes.

Regions	Cyclist	Tyre Burst	Animal collisions	Pedestrians	Roll-overs	Collisions	Fixed objects collisions	Fell/ Jumped from moving vehicle	Others	Grand Total
	10	1	37	17	9	4	3			81
Zambezi	10	1	37	17	9	4	3			81
Erongo	21	4	6	108	182	116	17	8	16	478
Hardap	6	3	13	19	99	23	6	2	5	176
Karas	5	5	5	24	60	12	3	5		119
Kavango (East & West)	6	1	10	55	43	27	9	2	12	165
Khomas	43	4	12	594	221	599	58	15	68	1614
Kunene	2	4	6	7	56	4	1	4	3	87
Ohangwena	4	2	6	34	48	39	11	9	3	156
Omaheke	1		11	15	46	5	2	3	2	85
Omusati	3		6	30	71	34	8	17	7	176
Oshana	9	1	6	119	79	115	14	8	13	364
Oshikoto		2	17	39	96	61	8	4	13	240
Otjozondjupa	7	10	42	49	192	72	8	1	12	393
Grand Total	117	37	140	1130	1210	1116	146	79	159	4134

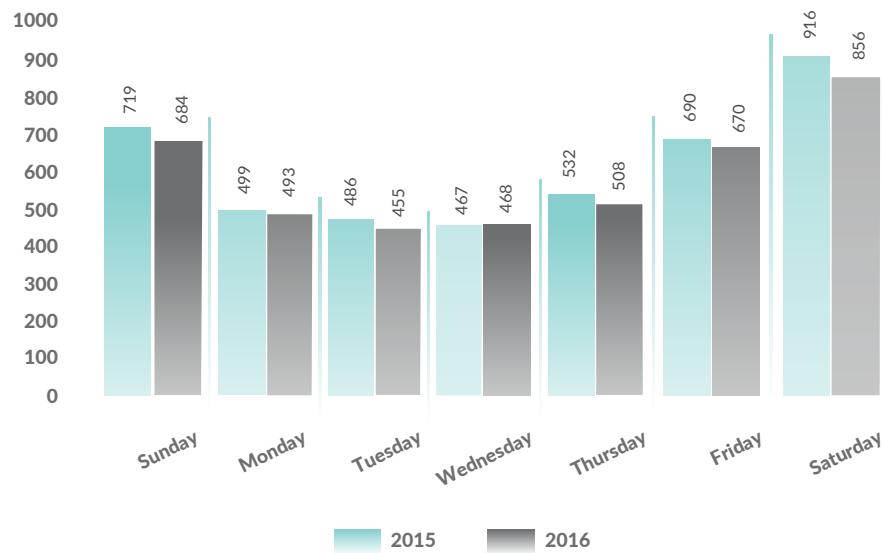


2.7 Crashes By Day Of The Week

Road crashes occur throughout the week, although the majority occurred during weekends (Figure 3). The pattern of crashes was similar in 2015 and 2016. As seen in Figure 3, just over half of all crashes in 2016 (53%) occurred between Fridays and Sundays, as was the case in 2015 (54%).

The crash distribution by day of the week for 2016 was as follows: Thursdays 12%, Mondays 12%, Wednesdays 11% and Tuesday had 11%.

Figure 3: Crashes by day of the week (2015 & 2016)



2.8 Crashes By Day Of The Week Per Region

The regional distribution of crashes by day of the week is displayed in Table 6. In most of the regions, crashes occurred on Saturdays, with the exception of Hardap, //Karas and Ohangwena regions where crashes were most common on Sundays.

In Kunene and Omaheke regions most of the recorded crashes occurred on Thursdays and Fridays respectively.

Table 6: Crashes by day of the week and per region (2016)

Regions	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Zambezi	11	14	13	7	3	14	19	81
Erlongo	84	55	51	52	53	78	105	478
Hardap	42	17	16	15	22	31	33	176
//Karas	22	19	13	9	14	23	19	119
Kavango (East & West)	30	21	13	24	15	27	35	165
Khomas	241	193	192	194	203	249	342	1614
Kunene	18	3	6	13	20	10	17	87
Ohangwena	31	18	14	18	17	27	31	156
Omaheke	17	11	8	4	7	20	18	85
Omusati	25	26	18	20	22	26	39	176
Oshana	63	32	38	40	47	69	75	364
Oshikoto	32	35	25	31	28	35	54	240
Otjozondjupa	68	49	48	41	57	61	69	393
Total	684	493	455	468	508	670	856	4134

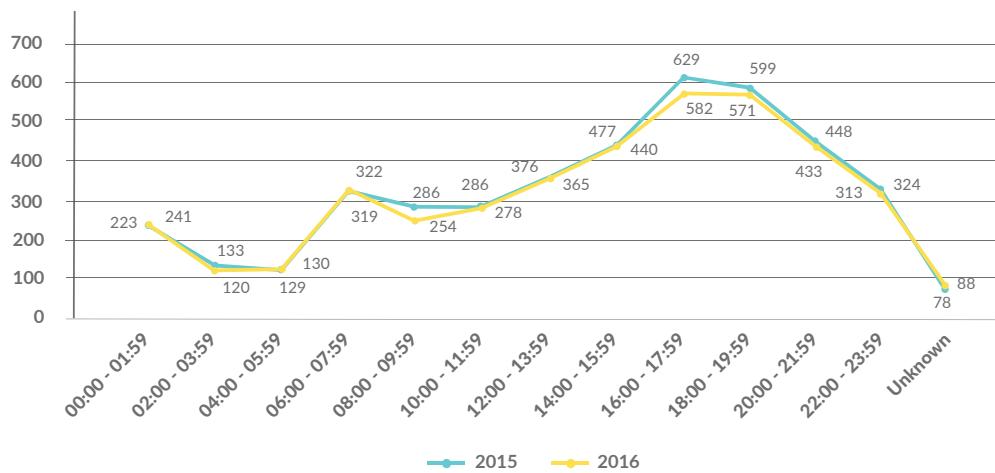
2.9 Crashes By Time Of Day

Figure 4 illustrates the distribution of crashes by time of day for 2015 and 2016. A similar trend of road crashes by time of day was observed during 2016 as compared to the previous year (2015). Most of the crashes occurred during evening hours which could be attributed to reduced visibility, high traffic volumes after working hours, and potentially inappropriate travel speed for the environment.

As indicated in Figure 4 below, nearly half of all crashes in 2016 occurred between 16H00 and 23H59 (i.e. 899 crashes, 46%). Other notable times for crashes were the morning hours between 06H00 to 09H59 with 573 crashes (14%), as well as lunch time between 12H00 and 13H59, where 365 (9%) crashes occurred.



Figure 4: Crashes by time of the day (2015 & 2016)



2.10 Type Of Vehicle Involved In Crashes

A total of 5,518 vehicles were involved in crashes recorded in 2016, as shown in Figure 5 below. This represents a 6% reduction from the 5,844 vehicles involved in crashes in 2015. The majority of the vehicles that were involved in crashes in 2016 were sedans (48%) and pick-ups (31%). It is worth noting that the number of trucks that were involved in crashes decreased by 16% from 309 in 2015 to 260 in 2016.

Figure 5: Types of vehicles involved in crashes (2015 & 2016)



2.11 Type Of Vehicle Involved In Crashes Per Region

The distribution of the type of vehicle involved in crashes by region is displayed in Table 7 below. Sedans dominated the list of vehicles involved in crashes for most of the regions during 2016. However, pick-up vehicles represented the majority of crash-involved vehicles in the Hardap (41%), Kunene (58%), Omaheke (53%), Omusati (65%) and Oshikoto (48%) regions.

In addition, trucks represented a significant proportion of vehicles involved in crashes, particularly in the Khomas (40%), Otjozondjupa (16%) and Erongo (14%) regions. In contrast most of the sport utility vehicles (SUV) involved in crashes were recorded in Khomas (40%) and the Erongo region (16%). Furthermore, the Khomas and Otjozondjupa regions had the highest number of buses involved in crashes with 45% and 16% respectively.

Table 7: Type of vehicles involved in crashes per region (2016)

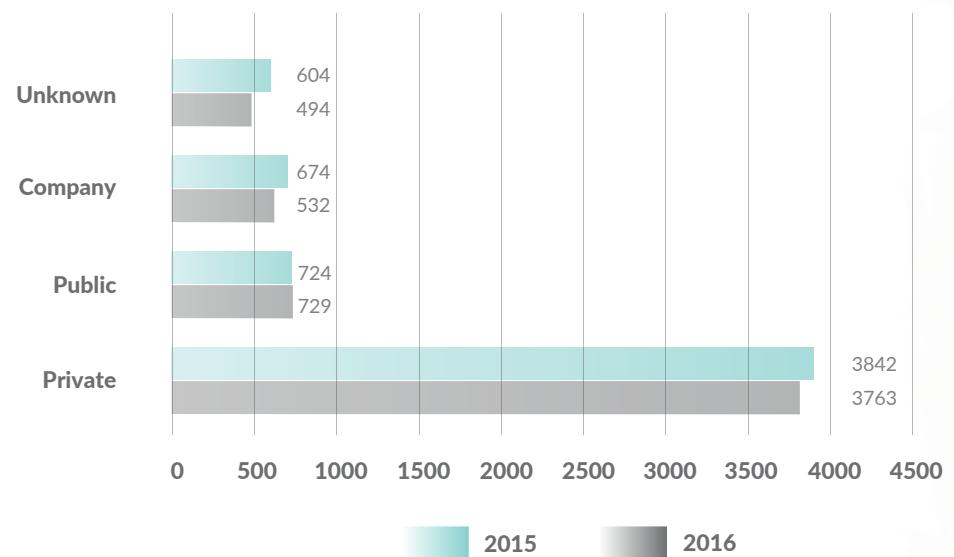
Regions	Bus	Motor Cycle	Pick-up	Sedan	SUV	Van	Trucks	Unknown	Others	Total
Zambezi	1	1	36	39	4		1	8	1	91
Erongo	12	19	191	308	34	2	36	29	1	632
Hardap	9	5	85	70	17	1	8	10	1	206
//Karas	10	5	43	43	12	2	7	9	3	134
Kavango (East & West)	6	3	58	86	15		7	23	1	199
Khomas	93	46	467	1350	86	9	105	197	1	2354
Kunene	3	1	53	19	3	1	6	6		92
Ohangwena	4	2	78	99	4		5	7	1	200
Omaheke	2	1	48	28	2		2	8		91
Omusati	2	1	142	61	2		3	2	4	217
Oshana	16	5	198	233	12	1	15	20	2	502
Oshikoto	15		149	101	10	3	23	6	3	310
Otjozondjupa	32	4	170	201	13	3	42	24	1	490

2.12 Use of vehicles involved in crashes

The ownership of vehicles involved in crashes during 2015 and 2016 is displayed in Figure 6. The majority of vehicles involved in crashes during 2016 were used for private purposes (68%), followed by those that were used for public transportation (13%), and then companies/business transports (10%). For 9% of the cases, the purpose of vehicle use could not be established.



Figure 6: Uses of vehicles (2015 & 2016)



Section 3: Injuries



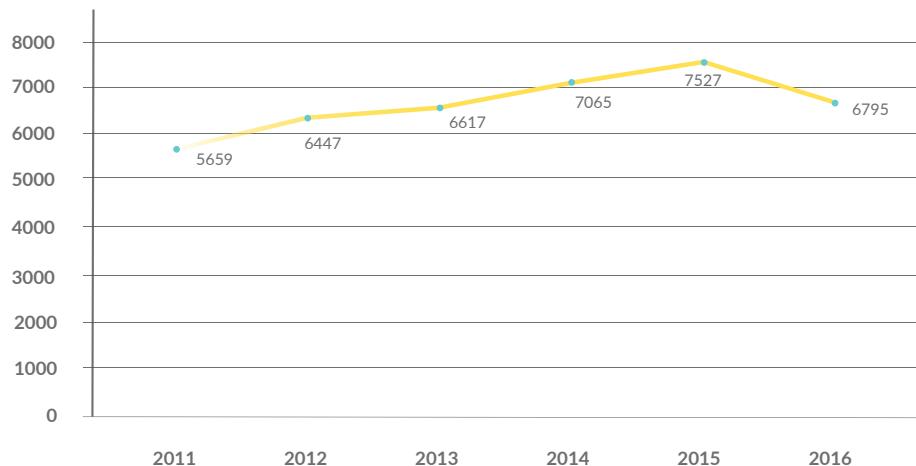
3.1 Introduction

This section provides an analysis of the injury data for the year 2016 with 2015 used as a comparison. A trend analysis of injuries over the past six years is also shown, as is the number of injured persons per month and region. An analysis of injuries by gender, age and road-user category is also presented. A critical aspect of the injury data analysis is the analysis of the patients' average length of stay in hospital. Data is also presented on the type of treatment, providers in the acute care phase as well as post-hospital 'caretakers' (i.e., allied health professionals), as well as information concerning the Spinal Cord Injury Rehabilitation Unit is presented within this section.

3.2 Injury Per Year

Over the past five years (2011–2015) there has been an increase in the number of people injured in road crashes in Namibia (Figure 7). During 2012, a significant increase of 14% was observed in the number of persons injured by road crashes as compared to 2011. A further 3% increase was observed between 2012 and 2013, and a 7% increase during 2014 as compared to 2013 and between 2014 and 2015 respectively. In contrast, the number of people injured declined by 10% in 2016 from the recorded 7,527 during 2015. On average 6,685 persons are injured in crashes each year.

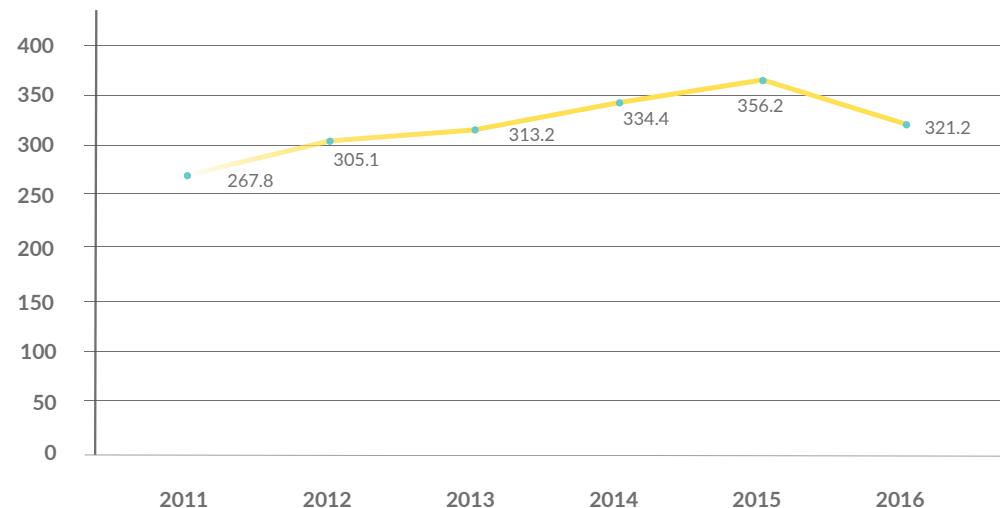
Figure 7: Injuries per year (2015-2016)



3.3 Injured Persons Per 100,000 Population

Figure 8 displays the ratio of injuries per 100,000 population for the past six years. The rates indicate an upward trend during the first five years, from the recorded 267.8 injured persons per 100,000 population during the year 2011 to 356.2 per 100,000 population during 2015. However in 2016 a reduction is observed with 321.2 injured persons per 100,000 population.

Figure 8: Injuries per 100,000 (2015-2016)



3.4 Injuries Per Month

Table 8 below provides the distribution of injured persons by month for the past six years (2011-2016). The month of December had the highest number of persons injured in road crashes, and this was the case for most of the years with the exception of 2013 when a higher number of injuries was recorded in July. The high number of crashes and persons injured during December can be attributed to increased traffic volumes inclusive of visitors during the festive season which includes Christmas and New Year celebrations.



During the 2016/17 Festive Season Road Safety Campaign period (22 Nov 2016 – 15 Jan 2017), a total of 621 crashes, 1,133 injuries and 131 fatalities occurred in Namibia. This is a period where high traffic volumes are experienced on national roads.

Table 8: Number of injured persons per month, per year (2011-2016)

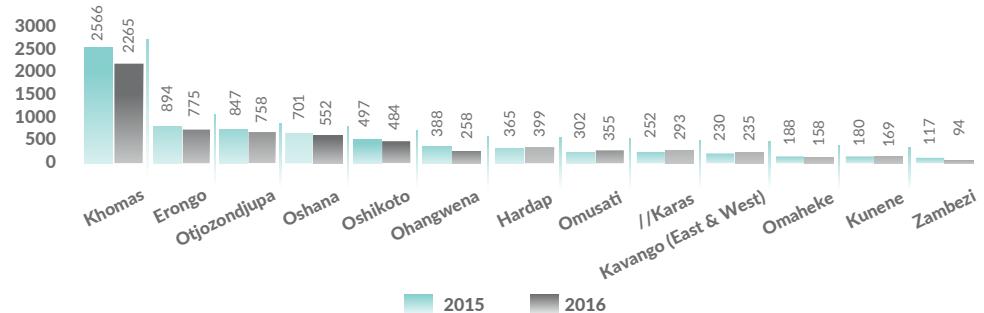
Months	2011	2012	2013	2014	2015	2016
Jan	43	482	469	505	516	589
Feb	27	487	541	549	473	417
Mar	47	461	580	567	645	534
Apr	69	585	449	579	575	588
May	91	516	513	601	639	628
Jun	170	473	551	529	678	568
Jul	169	509	676	549	578	667
Aug	239	614	554	683	722	592
Sep	353	582	572	459	605	535
Oct	689	558	560	598	694	477
Nov	601	458	506	563	613	411
Dec	785	722	646	883	789	789
Total	3283	6447	6617	7065	7527	6795

3.5 Injuries Per Region

The number of injured persons per region is displayed in Figure 9. The majority of those injured during 2016 occurred in Khomas (33%) followed by Erongo and Otozondjupa (11% each), Oshana (8%) and Oshikoto (7%).

The highest number of recorded crashes are also from these regions. In contrast, the Kunene and Zambezi regions had the lowest number of injured persons during 2016, representing 2% and 1% respectively.

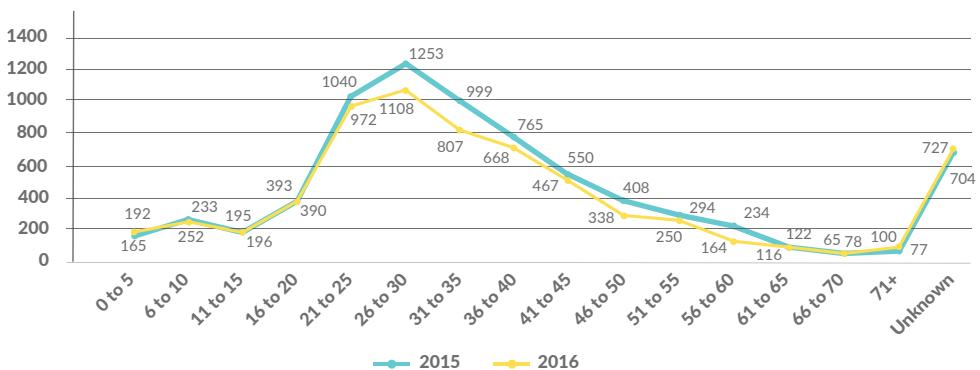
Figure 9: Injuries per region (2015 & 2016)



3.6 Injured Persons By Age Group

The analysis of injured persons by age group is presented in Figure 10 below. Even though injuries occurred across all age groups, the most impacted were young people, principally those aged between 16 and 35 years. The 16-35 year age group accounted for nearly half (3,280, 48%) of all persons injured in crashes during 2016. A similar trend was observed in 2015, whereby 49% of injured persons were young people. A further concern is that of children under 15 years of age, who represented 6% of those injured during 2016 and who in most cases are vulnerable to pedestrian-related crashes. There is also a high number of persons aged 71 years and older injured in crashes, which may also reflect increasing frailty with advancing years.

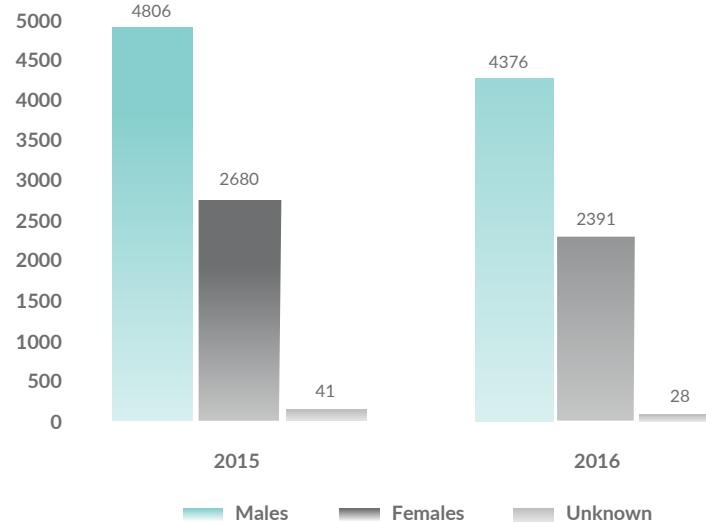
Figure 10: Injured persons by age group (2015 & 2016)



3.7 Injured Persons By Gender

In 2015 and 2016, 64% of persons injured in road crashes were male, while females accounted for only 35%. This is a consistent pattern over the years.

Figure 11: Injured persons by gender (2015 & 2016)

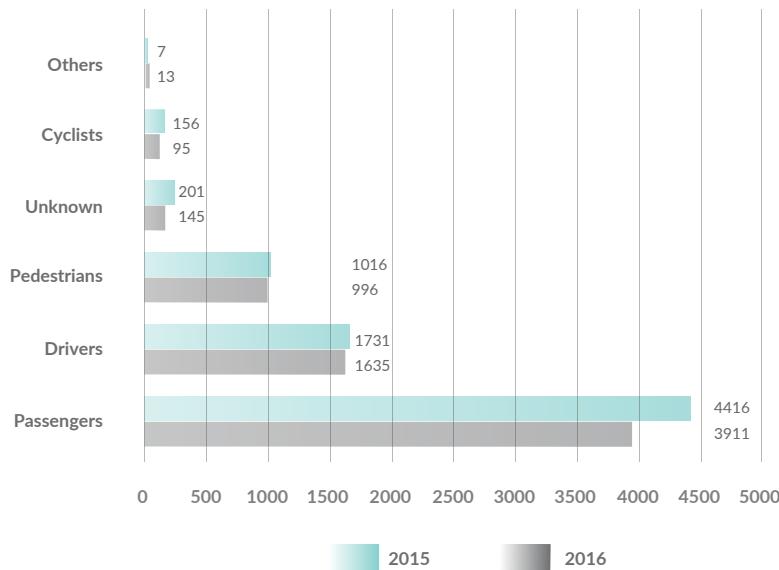


3.8 Injured Persons By Road User Category

Figure 12 provides the distribution of injured persons by road user category for 2015 and 2016. When passengers represented the highest number of people injured.

For 2016, passengers represented 58% of those injured, followed by drivers (24%) and pedestrians (15%). Cyclists accounted for only 1% of those injured during 2016.

Figure 12: Injured persons by road-user category (2015 & 2016)



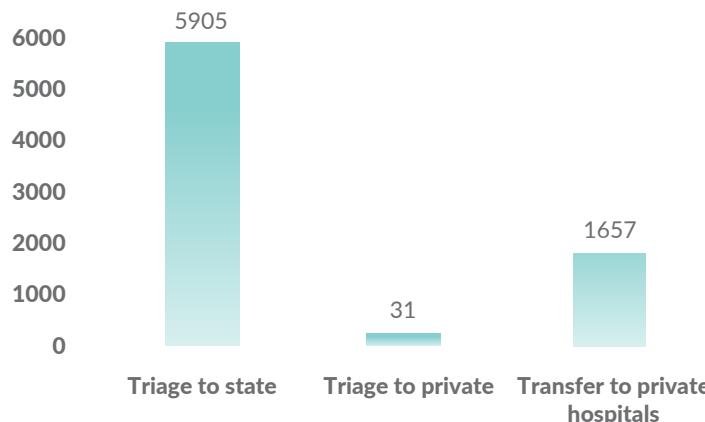
3.9 Triaging At Hospitals

Figure 13 indicates that most of the injured persons (99.5%) were transported to various state hospitals nationwide, whereas only 0.5% of those injured were transported to private hospitals for injury management. The MVA Fund resolved in 2011 to triage all injured persons at state hospitals, although an exception is made when the treatment and equipment required to treat the patient as per the assessment of paramedics at scenes or treating doctors, can only be provided in private hospitals.

If this is the case, then referral to a private hospital is considered. As can be seen from Figure 13 below, 1,657 patients were referred to private medical facilities after the initial assessment and admission at state hospitals.



Figure 13: Injured persons by gender (2016)



3.10 Average Length Of Stay In Hospitals

Table 9 indicates the average number of days per month spent by patients in both public and private hospitals as compared to those who stayed in private hospitals only. This is presented for patients admitted for moderate and severe injuries. Patients who sustained moderate injuries had a total average length of stay in hospital (public and state) of 10.8 days (4.5 private hospitals), while those with severe injuries had a total average hospital stay (public and private) of 16.8 days (12.3 private hospitals).

Table 9: Length of Stay (LOS) in days for Moderate & Severe cases per month (2016)

Months	Moderate injuries		Severe injuries	
	Total average LOS per month (state and private)	Private facilities average LOS	Total average LOS per month (state and private)	Private facilities average LOS
January	14.7	2.2	14.4	10.4
February	18.8	3.5	29.9	4.2
March	13.2	3.6	29.2	17.0
April	10.1	5.9	15.4	11.3
May	7.6	4.9	8.1	5.0
June	8.8	4.6	5.7	7.1
July	8.8	6.0	8.4	15.5
August	6.2	3.3	16.3	13.8
September	14.0	4.4	55.6	28.0
October	9.4	4.4	5.0	12.2
November	9.8	7.2	6.0	14.6
December	8.3	3.5	8.0	8.4
Average per year	10.8	4.5	16.8	12.3

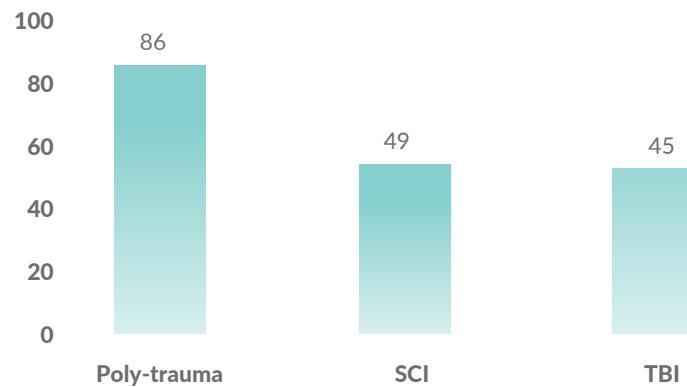
3.11 Seriously Injured

Figure 14 below indicates the number of persons seriously injured during 2016. The three types of severe injuries sustained during 2016 were Poly-trauma (48%), Spinal Cord Injuries (SCI) (27%) and Traumatic Brain Injury (TBIs) (25%).

These types of injuries contributed to the extended length of stay per month for severe cases.



Figure 14: Seriously injured persons (2016)



3.12 Caretakers For Seriously Injured Patients

The Fund makes provision for seriously injured patients to have access to caretakers, whose primary responsibility is to assist the injured with their daily living activities. This includes patients with severe traumatic brain injury and spinal cord injury. Caretaker training commences immediately after the patient is out of the acute stage of injury and continues when they are discharged from hospital. The in-hospital caretaker training is provided by the Rehabilitation Team (Occupational Therapists, Physiotherapists, Rehabilitation Coaches and Nurses), which is involved in the management of MVA Fund claimants in various rehabilitation facilities.

The MVA Fund provides caretaker training in various regions. During 2016, a total of 37 caretakers were trained in Windhoek (10), Rehoboth (9), Rundu (7) and Walvis Bay (11). The overall caretaker satisfaction level with the training was 94%. The total cost spent by the Fund on training caretakers during the year was N\$94 180.00. These costs cover meals, transport and accommodation for caretakers who stayed far from the training venues. Caretakers who completed the one and a half week training were provided with certificates. The training was provided by the Fund's Rehabilitation Quality Specialist and Rehabilitation Coach.

The training manual which was developed in 2015 has been translated into the following languages based on the identified target groups: Afrikaans, Oshiwambo, Otjiherero, Damara/Nama, Silozi and Rukwngali.

The high attrition rate of caretakers remains a challenge due to payment models. The Fund will explore optimal models for caretaker support in the future.

3.13 Spinal Cord Injury Rehabilitation Unit

The Spinalis Namibia Spinal Cord Injury (SCI) Rehabilitation Unit was established through a tripartite partnership between the MVA Fund, the Ministry of Health and Social Services and the Spinalis Foundation of Sweden. The Unit is situated in Windhoek Central Hospital and was officially opened in October 2013 by the then Minister for Health and Social Services, Dr. Richard Kamwi.

The Unit provides services to patients who have sustained spinal cord injuries, regardless of whether injuries were as a result of motor vehicle crashes. The overall objective of the Unit is to offer a one-stop service to patients, with the aim of returning spinal cord injured persons to a life of maximum possible independence at the time of discharge from the Unit. In 2016 a total of 41 patients with spinal cord injuries were provided with rehabilitation services, 30 of which were MVAF clients and 11 who were injured due to other causes. Based on these treatment numbers, road crashes account for nearly three-quarters of SCI cases in Namibia.

To aid the performance of the Spinalis Unit in 2016, the Fund purchased physiotherapy equipment to the value of N\$74,630.20, thus reducing the need to transport patients to the physiotherapy department downstairs, an exercise which can be time consuming. Furthermore, the Fund financed the repairs and maintenance of some patient rooms and staff lavatories at a total cost of N\$30,712.00.

As a way of developing the specialist workforce, eight (8) volunteers recruited from the National Youth Service have been working at Spinalis under a two year contract with effect from 1 May 2016.

These volunteers are responsible for assisting the short staffed rehabilitation team in their daily routines. Furthermore a female Rehabilitation Coach was appointed to provide peer support especially for female patients who may not be comfortable to discuss sensitive issues with the male Rehabilitation Coach, particularly on topics such as sexuality and continence. With respect to equipment, an agreement for the MVA Fund to purchase Panthera wheelchairs directly from Panthera was concluded in order to reduce the cost of purchasing wheelchairs and accessories as well as reducing the time for delivery.



Following this agreement a one day training on prescription of Panthera wheelchairs was conducted to staff at the Rehabilitation Unit by a Panthera representative, MVA Fund Case Management staff and technicians from LOREWO wheelchair workshop in Oshakati. From June to December 2016 a total of 17 wheelchairs were purchased through this agreement and the process is working smoothly for timely delivery of high quality wheelchairs.

The Spinalis Foundation Sweden continues to provide support to Spinalis Rehabilitation Unit. During 2016 a team from Sweden conducted a visit to Namibia, reporting that they were very impressed by the work being performed at the Spinalis Rehabilitation Unit.

To ensure the smooth delivery of services at the Unit, there is a Case Manager allocated by the Fund to assist clients in obtaining the necessary services and the Rehabilitation Quality Specialist assists with the process on procurement of assistive devices.

The Spinalis Rehabilitation Unit has a capacity of 8 beds for active rehabilitation which can present as a challenge due to high numbers. In particular, this space is inadequate in situations where there are more patients with spinal cord injuries at a single point in time. Furthermore, this space is inadequate to allow for admission of patients for re-rehabilitation i.e. (re-admission of patients who were discharged before to train them on further skills where possible). A further challenge is the shortage of specialist staff, with the most affected area being physiotherapy where there is only one Physiotherapist available. Services provided by Spinalis Rehabilitation Unit remain centralized and patients from all regions are treated in Windhoek. Spinalis team outreach to the regions could be beneficial, but this remains a challenge due to staff shortages and availability of trained professionals.



Section 4: Fatalities



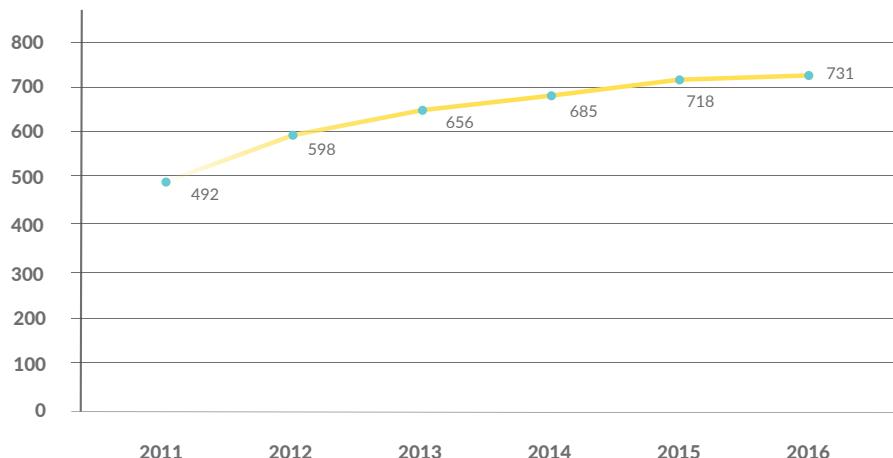
4.1 Introduction

This section presents an analysis of road crash fatality data for 2016 as compared to that of the preceding year. The trend of fatalities over the past six years is also presented. Furthermore, fatality data for the past five years are analyzed per month and region. Other factors examined in this section are fatality statistics by age group, gender and road user category, as well as place of death.

4.2 Fatalities Per Year

Road crash fatalities have become one of the leading causes of deaths in Namibia and the numbers continue to climb. As shown in Figure 15 below, fatalities increased by 22% during 2012 as compared to 2011, by 10% during 2013 as compared to 2012 by 4% during 2014 as compared to 2013. A 5% increase during 2015 was observed as compared to 2014. As in all preceding years, 2016 saw a 2% increase in fatalities as compared to the 2015 road deaths. Overall, the data from the previous six years show that on average, 647 road deaths are recorded annually in Namibia.

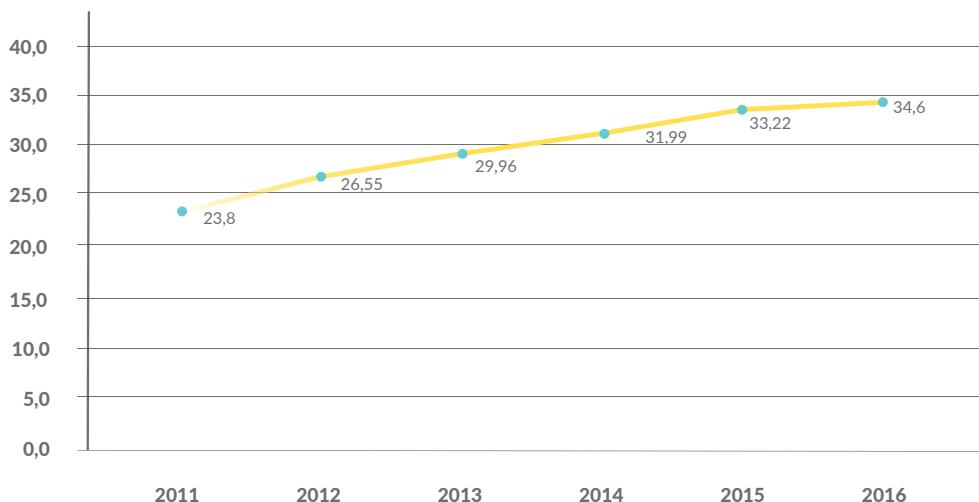
Figure 15: Fatality Trend (2011-2016)



4.3 Fatalities Per 100, 000 Population

Figure 16 shows the trend of fatality rates per 100,000 population from 2011 to 2016. As Figure 16 demonstrates, the fatality rate has been increasing each successive year. In 2011 the fatality rate was 23.8 fatalities per 100, 000 persons, and by 2016 this had increased to 34.6 fatalities per 100,000 persons in the population, representing a 45% increase.

Figure 16: Fatality rates per 100,000 population per year (2011-2016)



4.4 Fatalities per month

The number of recorded fatalities per month for the past five years is displayed in Table 10 below. For the year 2016, road fatalities occurred throughout the year, while crashes were more common in some months compared to others. As shown in Table 10, the highest number of fatalities between 2013 and 2016 occurred during December (12%). During 2012, July experienced the highest proportion of fatalities (12%), whilst August was the leading month in terms of fatalities for year 2014, accounting for 12% of the annual fatalities recorded.



It is also worth noting, that for the four consecutive years (2012 to 2015), the lowest number of fatalities occurred during February.

Table 10: Fatalities per month (2012-2016)

Months	2012	2013	2014	2015	2016
Jan	40	43	63	66	62
Feb	36	35	39	41	46
Mar	59	44	64	68	54
Apr	56	58	46	68	62
May	47	42	63	51	60
Jun	37	54	56	51	78
Jul	71	61	60	73	49
Aug	38	73	84	56	53
Sep	48	63	47	57	65
Oct	64	52	44	52	44
Nov	42	53	54	76	70
Dec	60	78	65	59	88
Total	598	656	685	718	731

4.5 Fatalities Per Region

Table 11 illustrates the number of fatalities recorded per region during the past five years. During 2012, 2013 and 2015 most fatalities recorded were recorded in the Otjozondjupa region representing 16%, 13% and 14% respectively.

However, in 2014 and again in 2016, Khomas region recorded the highest number of fatalities representing 14% and 15% respectively. The regions with the least number of fatalities during the year 2015 were Zambezi and Omaheke representing 4%.

Table 11: Fatalities per region (2012-2016)

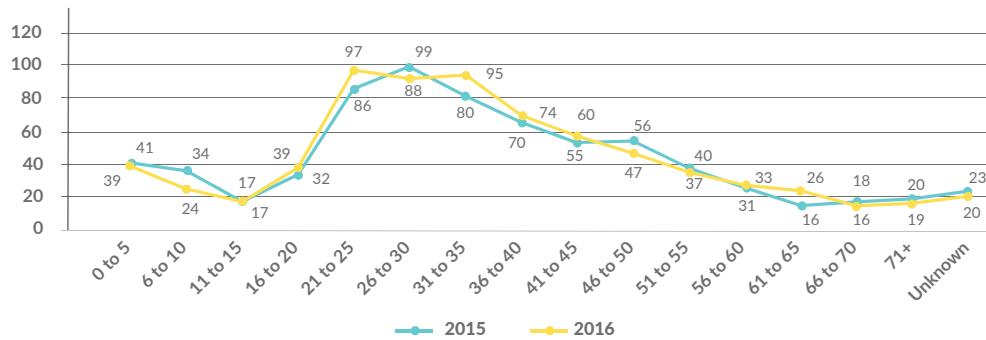
Regions	2012	2013	2014	2015	2016
Khomas	90	75	99	89	106
Otjozondjupa	96	82	96	101	82
Oshana	53	63	53	58	66
Oshikoto	53	56	85	77	66
Kavango (East & West)	58	63	54	59	58
Kunene	31	27	26	30	57
Erlongo	62	56	74	70	56
Omusati	26	38	38	52	53
Hardap	35	51	36	57	47
//Karas	25	36	26	30	45
Ohangwena	36	45	48	45	40
Zambezi	19	35	16	24	29
Omaheke	14	29	34	26	26
Total	598	656	685	718	731



4.6 Fatalities By Age Group

Similar to the injury statistics, the recorded fatality data indicate that in Namibia, young people represented the largest group of people killed. As can be seen from Figure 17 below, the majority of those that died during the year 2016 were between 16 and 35 years of age (44%). A similar pattern was observed during 2015, with persons aged 16-35 representing 41% of the fatalities. Children under 15 years of age were also impacted by road crashes, accounting for 11% of those who died.

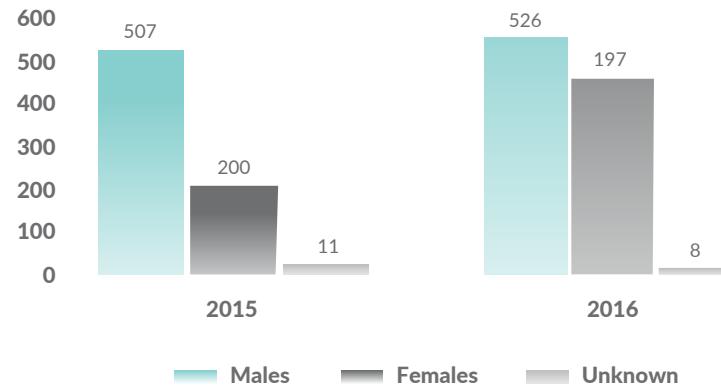
Figure 17: Fatalities by age group (2015 & 2016)



4.7 Fatalities By Gender

Figure 18 below illustrates the distribution of the 2015 and 2016 fatalities by gender. For both years (2015 and 2016) most of those killed in road crashes were males, representing 71% during 2015 and 72% during 2016. The overrepresentation of males in fatal road crashes remains a major concern.

Figure 18: Fatalities by gender (2015 & 2016)



4.8 Fatalities By Gender, Per Region

Table 12 below indicates the distribution of fatalities by gender per region for 2016. In every region in Namibia, a higher number of males than females were killed. However, the largest number of female fatalities was recorded in the Otjozondjupa region and Khomas region, representing 13% each. These two regions also had the highest number of fatalities overall, and as such had the largest number of male fatalities.



Table 12: Fatalities by gender, per region (2016)

Regions	Males	Females	Unknown	Total
Khomas	81	25	0	106
Otjozondjupa	55	26	1	82
Oshana	52	13	1	66
Oshikoto	48	18	0	66
Kavango (East & West)	43	14	1	58
Kunene	39	18	0	57
Erlongo	42	14	0	56
Omusati	36	16	1	53
Hardap	38	8	1	47
//Karas	29	16	0	45
Ohangwena	24	15	1	40
Zambezi	22	7	0	29
Omaheke	17	7	2	26
Total	526	197	8	731

4.9 Fatalities By Gender, Per Age Group

Table 13 below presents the number of recorded fatalities by gender and age group. Of the female road users killed in 2016, approximately 18% were under 15 years of age, in comparison to only 8% of male road users killed from the same age group. Further, young people between the ages of 16 and 35 years accounted for 45% of the total males and 40% of the total number of females killed in 2016. Road users above the age of 60 years accounted for 14% of the total female fatalities and 9% of total male fatalities.

Table 13: Fatalities by gender, per age group (2016)

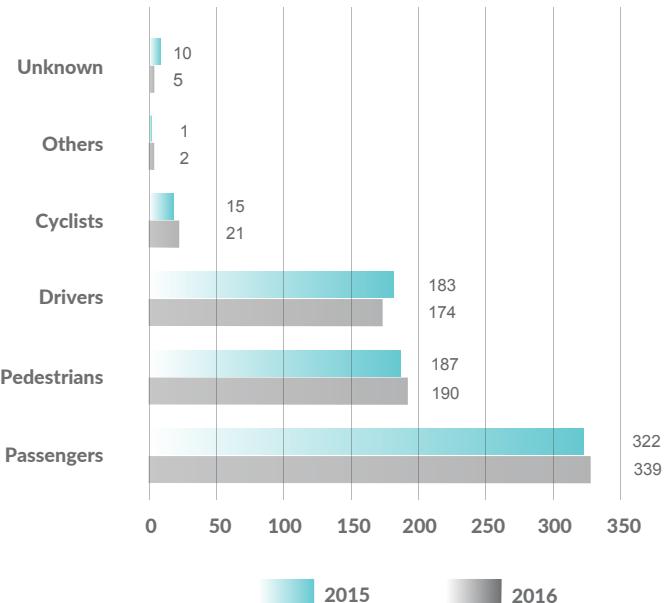
Age group	Males	Females	Unknown	Total
0 to 5	21	17	1	39
6 to 10	13	11	0	24
11 to 15	10	7	0	17
16 to 20	26	13	0	39
21 to 25	71	25	1	97
26 to 30	68	20	0	88
31 to 35	74	21	0	95
36 to 40	65	9	0	74
41 to 45	46	14	0	60
46 to 50	32	15	0	47
51 to 55	27	9	1	37
56 to 60	25	8	0	33
61 to 65	16	10	0	26
66 to 70	11	5	0	16
71+	10	9	0	19
Unknown	11	4	5	20
Total	526	197	8	731



4.10 Fatalities By Road User Category

Similar to those injured, the majority of persons killed were passengers and pedestrians. In 2016, passengers represented nearly half of all persons killed in Namibia (46%), followed by pedestrians (26%) and drivers (24%). As can be seen from Figure 19 below, the number of passengers who died in a road crash increased by 5% between 2015 and 2016. Pedestrian fatalities also increased by 2%. In contrast, the number of fatalities for drivers involved in road crashes decreased by 5% when comparing 2016 to that of the preceding year. Cyclist fatalities increased by 40% from 15 cyclists that died in 2015 to 21 reported cyclist deaths during 2016.

Figure 19: Fatalities by road-user category (2015 & 2016)



4.11 Fatalities By Road User Categories, By Age Group

The distribution of the recorded fatalities across road user category and by age group is displayed in Table 14 below. The majority of the children under the ages of 15 years who were killed in road crashes were pedestrians (50%) and passengers (48%). Fatalities for the critical age groups ranging from 16 and 35 years of age consisted of: passengers (50%), drivers (24%), pedestrians (22%) and cyclists (4%).

Table 14: Fatalities by road-user category, by age group (2016)

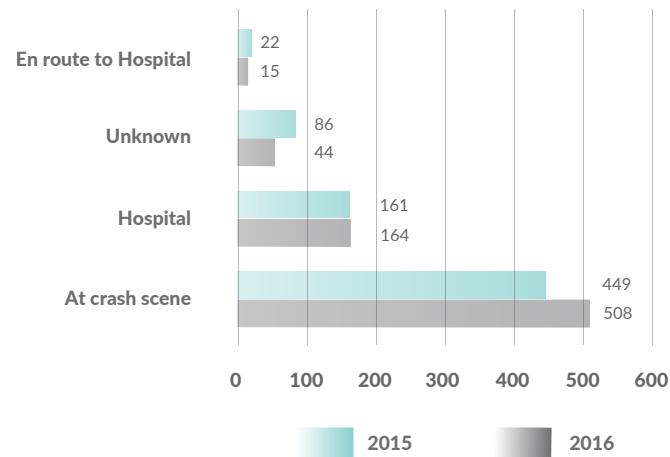
Age groups	Driver	Other	Passenger	Pedestrian	Unknown	Cyclists	Total
0 to 5	0	0	17	21	1	0	39
6 to 10	0	0	9	15	0	0	24
11 to 15	0	0	12	4	0	1	17
16 to 20	5	0	22	7	0	5	39
21 to 25	19	0	51	25	0	2	97
26 to 30	21	0	49	16	0	2	88
31 to 35	31	0	39	22	0	3	95
36 to 40	30	0	33	10	0	1	74
41 to 45	24	1	22	11	0	2	60
46 to 50	11	1	22	10	0	3	47
51 to 55	8	0	18	10	0	1	37
56 to 60	12	0	11	10	0	0	33
61 to 65	4	0	14	8	0	0	26
66 to 70	5	0	6	5	0	0	16
71+	3	0	6	10	0	0	19
Unknown	1	0	8	6	5	1	21
Total	174	2	339	190	5	21	731



4.12 Fatalities By Place Of Death

The majority of deaths that occurred were confirmed by paramedics at the scene of the crash (see Figure 20). In 2016, 69% of the deceased had died at the scene of the crash, 22% died while receiving medical attention at hospitals and 2% died while being transported to hospitals. This was similar to that observed during the year 2015, whereby most fatalities occurred at crash scenes (63%) followed by hospitals (22%).

Figure 20: Fatalities by place of death (2015 & 2016)



Section 5: Pedestrian Crashes



5.1 Introduction

This section presents a detailed analysis of the pedestrian crashes that were recorded in 2016. The analysis is done in relation to the pedestrian crashes recorded during 2015 and will focus on pedestrian crashes per region, by day of the week and time of day. Furthermore, pedestrian casualties will be examined by age group and gender.

5.2 Pedestrian Crashes Per Year

Figure 21 shows that the number of pedestrian crashes increased by 7% between 2012 and 2013, then further increased by 5% between 2013 and 2014. However, a 2% decrease was observed during 2015 as compared to 2014. Pedestrian crashes continue to decline, as a 1% decrease was observed during 2016 in comparison to the previous year (2015). Across the past five years, on average, a total of 1,115 pedestrian crashes are recorded on Namibian roads every year.

Figure 21: Pedestrian crash trend (2012-2016)



5.3 Pedestrian Crashes Per Region

Table 15 below shows the distribution of the recorded pedestrian crashes per region. Although pedestrian crashes occurred in all regions in Namibia during 2016, the regions with the highest pedestrian related crashes were Khomas (53%), Oshana (11%), Erongo (10%) and Kavango (East & West) (5%).

Furthermore, 37% of all crashes that occurred in the Khomas region were pedestrian related, while for Kavango (East & West) and Oshana regions, pedestrian crashes accounted for 33% of the total number of reported crashed each.

Table 15: Pedestrian crashes per region (2016)

Regions	Total Crashes	Pedestrian Crashes	Percentages
Khomas	1614	594	37%
Erongo	478	108	23%
Otjozondjupa	393	49	12%
Oshana	364	119	33%
Oshikoto	240	39	16%
Hardap	176	19	11%
Omusati	176	30	17%
Kavango (East & West)	165	55	33%
Ohangwena	156	34	22%
//Karas	119	24	20%
Kunene	87	7	8%
Omaheke	85	15	18%
Zambezi	81	37	46%
Total	4134	1130	

5.4 Pedestrian Crashes By Time Of Day

As it is the case with all types of crashes, the majority of the pedestrian crashes occurred during late afternoon hours (Figure 22), and this was seen in the 2015 and 2016 fatality statistics.

During 2016, a total of 48% of the pedestrian crashes occurred between 16H00 and 23H59. Likewise, for the previous year, 50% of the pedestrian crashes occurred during the same time range (16H00 to 23H59).



Figure 22: Pedestrian crashes by time of the day (2015 & 2016)



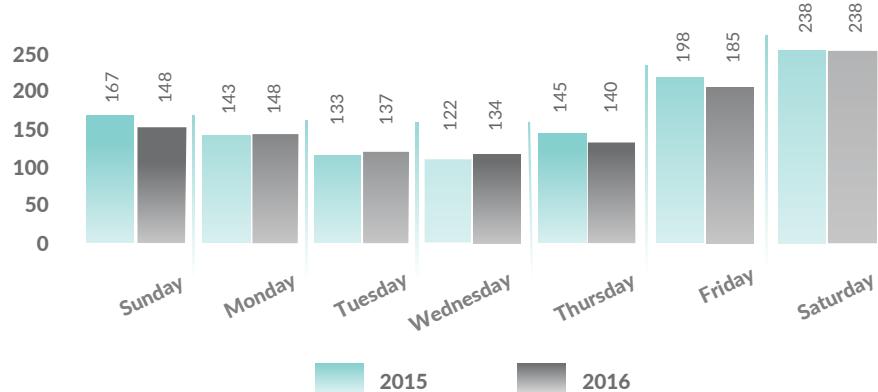
5.5 Pedestrian Crashes By Day Of Week

Figure 23 shows the distribution of the recorded pedestrian crashes by day of the week for the years 2015 and 2016. In 2016, the majority of pedestrian crashes occurred on Saturdays (21%) and Fridays (16%).

This is similar in 2015 where the highest proportion of crashes occurred on these days, with Saturdays recording 21% and Fridays recording 17% of pedestrian crashes.

For 2016, the lowest number of pedestrian crashes were recorded on Wednesdays (12%) and Thursdays (12%) compared to other days of the week.

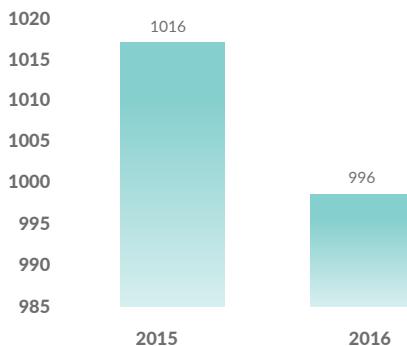
Figure 23: Pedestrian crashes by day of the week (2015 & 2016)



5.6 Pedestrian Injuries

Figure 24 displays the number of injured pedestrians recorded for 2015 and 2016. The number of pedestrian injuries decreased by 2% during 2016 as compared to the previous year. On average, a total of 1,006 pedestrians are injured annually.

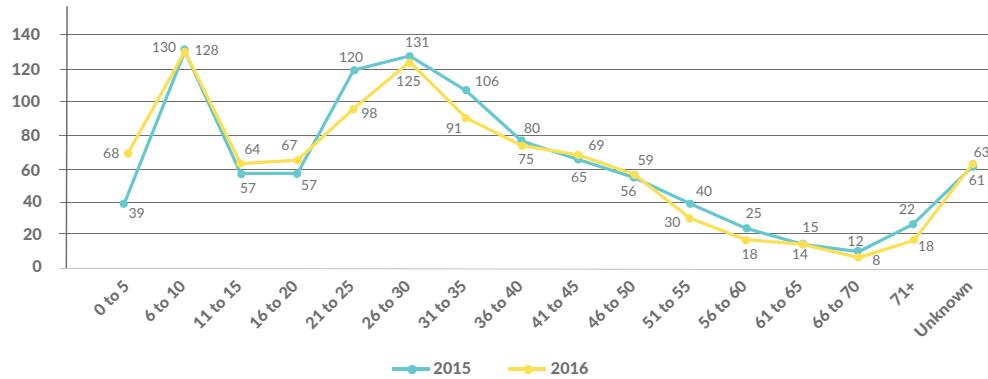
Figure 24: Pedestrians injured per year (2015 & 2016)



5.7 Number Of Injured Pedestrians By Age Group

Figure 25 shows the number of injured pedestrians by age group. Approximately 38% of the injured pedestrians were aged between 16 and 35 years, while 26% of those injured were children under 15 years of age. These results show that children and the youth particularly are more vulnerable to pedestrian related crashes amongst other road users.

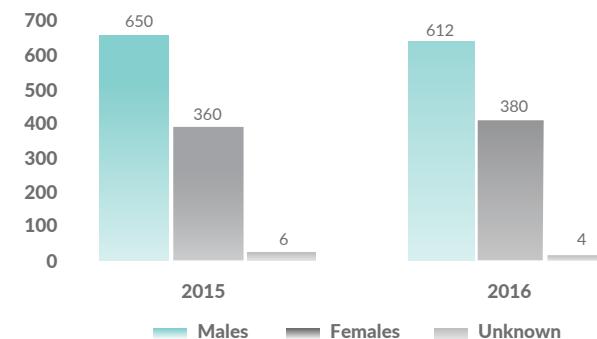
Figure 25: Pedestrians injured by age group (2015 & 2016)



5.8 Number Of Injured Pedestrians By Gender

The gender distribution of the injured pedestrians for both 2015 and 2016 is displayed in Figure 26 below. Across both years, the majority of those injured were males. For 2016, 61% of the injured pedestrians were males, whilst in 2015 this figure stood at 64%.

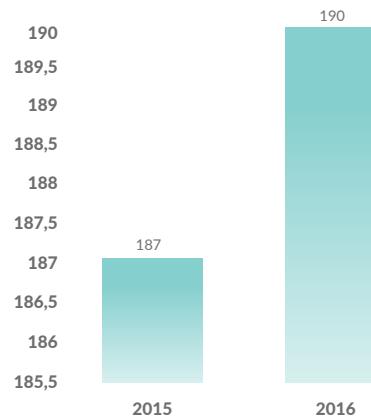
Figure 26: Injured pedestrians by gender (2015 & 2016)



5.9 Pedestrian Fatalities

The annual pedestrian fatalities for the years 2015 and 2016 are displayed in Figure 27. The number of pedestrian fatalities recorded in 2016 was 2% higher than what was reported during 2015. On average, across the past two years, 189 pedestrian fatalities were recorded each year.

Figure 27: Pedestrians injured per year (2015 & 2016)

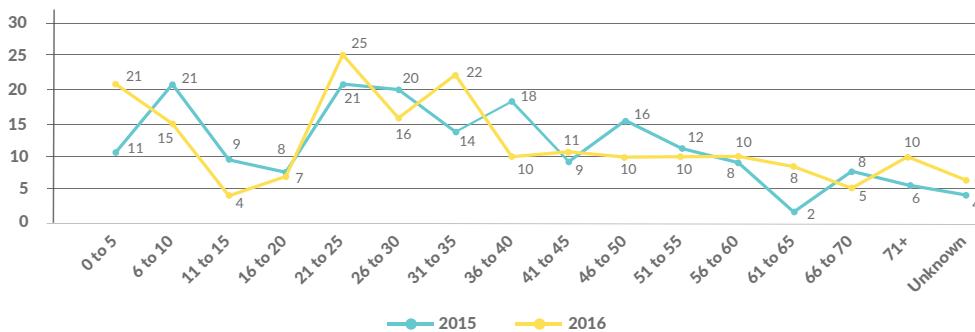


5.10 Pedestrian Fatalities By Age Group

Figure 28 indicates the distribution of the recorded pedestrian fatalities by age group during 2015 and 2016. In 2016, young people aged between 16 and 35 years accounted for the largest proportion of pedestrian fatalities (47%), whereas children aged 15 years and younger accounted for 21% of pedestrian fatalities during the same year.

The same scenario was observed during the previous year (2015), where young people aged between 16 and 35 years accounted for 34%, while children aged 15 years and younger accounted for 22% of pedestrians killed.

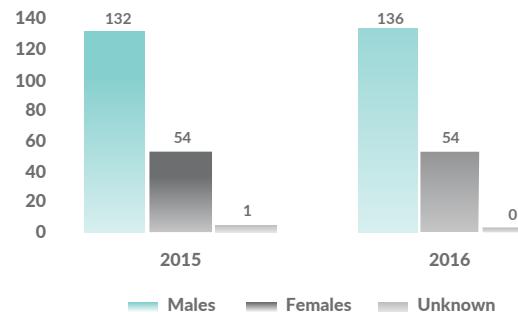
Figure 28: Pedestrian fatalities by age group (2015 & 2016)



5.11 Pedestrian Fatalities By Gender

Figure 29 below, presents the distribution of pedestrian fatalities by gender. The majority of the recorded pedestrian fatalities were males (72%) during 2016, which is almost identical to the proportion of male pedestrians killed in 2015 (71%).

Figure 29: Pedestrian fatalities by gender (2015 & 2016)

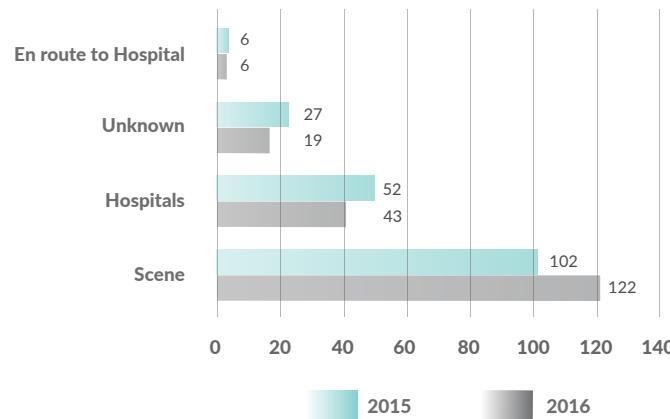


5.12 Pedestrian Fatalities By Place Of Death

Figure 30 below indicates the number of pedestrian fatalities by place of death for the years 2015 and 2016. Nearly two-thirds of pedestrian deaths occurred at the crash scene (64%), followed by those that occurred in hospitals (23%); only a small percentage occurred during transportation to hospital (3%).

A similar pattern was observed in 2015, where the majority of the pedestrian deaths occurred at the crash scene (55%) and 28% others died while they were admitted in hospital.

Figure 30: Pedestrian fatalities by place of death (2015 & 2016)



Section 6: Roll-Over Crashes



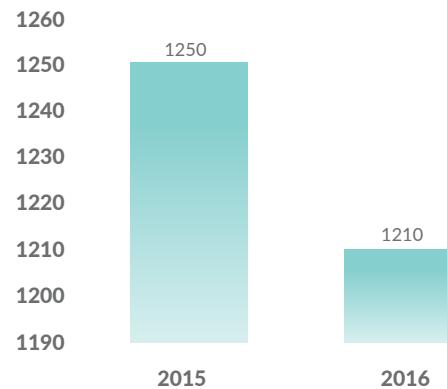
6.1 Introduction

This section provides an in-depth analysis of the recorded roll-over crashes during the year 2016 in comparison to 2015. These type of crashes will be examined across the regional distribution, the time of day and also by the day of the week. Out of 6795 injuries recorded in 2016, about 2701 (40%) were as a result of roll-over crashes. Of the 731 fatalities reported in 2016 a total of 265 (36%) died as result of roll-over related crashes.

6.2 Roll-Over Crashes Per Year

Roll-over crashes are very common in Namibia. Of the 4,134 crashes recorded during 2016, 1,210 (29%) were vehicle roll-overs. Roll-over crashes decreased by 3% from 1,250 reported crashes in 2015 to 1,210 in 2016. According to these statistics, on average 1,230 roll-over crashes occur each year. This is shown in Figure 31 below.

Figure 31: Roll-over crashes per year (2015 & 2016)



6.3 Roll-Over Crashes Per Region

The roll-over crashes per region recorded in 2016 are displayed in Table 16 below. The majority of the recorded roll-over crashes that occurred during 2016 were recorded in Khomas region, representing 18% of the total rollover crashes during that year. Other regions with a large number of roll-over crashes were Otjozondjupa (16%), Erongo (15%), and Hardap with 8%.

It should also be noted that Khomas, Erongo and Otjozondjupa regions were also the top three regions with the highest recorded number of crashes during the same year. Roll-over crashes are mainly attributed to speeding, fatigue, worn-out tyres, alcohol and other substance abuse, resulting in a loss of vehicle control.

Table 16 displays the proportion of roll-over crashes in relation to all other types of crashes recorded in each region. Roll-over crashes constituted a large proportion as compared to other crash types in Kunene (64%), Hardap (56%), Omaheke (54%) and //Karas (50%) regions. The lowest number of roll-over crashes were recorded in Kavango (East and West) and Zambezi regions with 26% and 21% respectively.

Table 16: Roll-over crashes per region (2016)

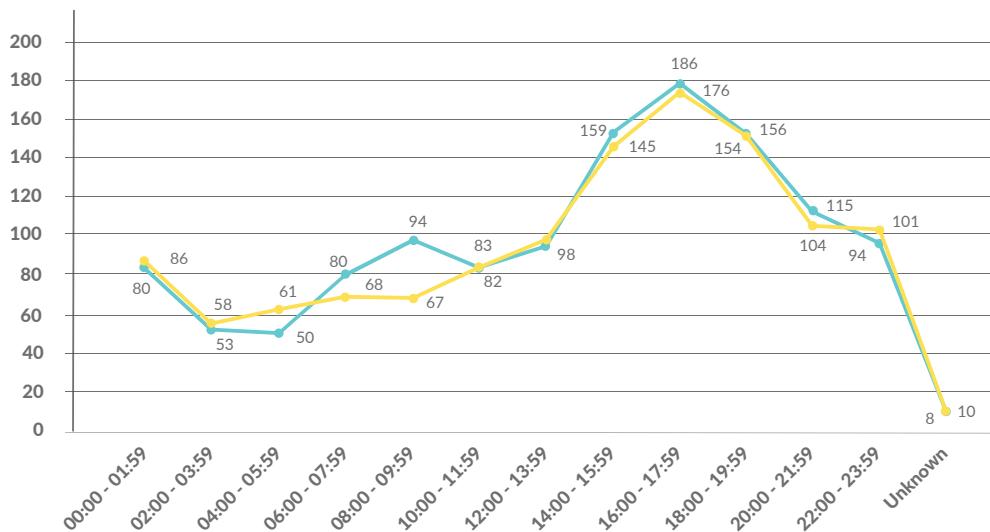
Regions	Total Crashes	Roll-overs	Percentage
Khomas	1614	221	14%
Erongo	478	182	38%
Otjozondjupa	393	192	49%
Oshana	364	79	22%
Oshikoto	240	96	40%
Hardap	176	99	56%
Omusati	176	71	40%
Kavango (East & West)	165	43	26%
Ohangwena	156	48	31%
//Karas	119	60	50%
Kunene	87	56	64%
Omaheke	85	46	54%
Zambezi	81	17	21%
Total	4134	1210	



6.4 Roll-Over Crashes By Time Of Day

Figure 32 below displays the distribution of roll-over crashes by time of day. Most of the recorded roll-over crashes occurred during late afternoon hours. Almost half (44%) of these crashes occurred between 16H00 and 23H59. It is known that night driving increases the risk of being involved in crashes and this is a common scenario in many crashes in Namibia. As shown by figure 32 below, in 2015 44% of roll-over crashes occurred during late afternoon hours.

Figure 32: Roll-over crashes by time of the day (2015 & 2016)

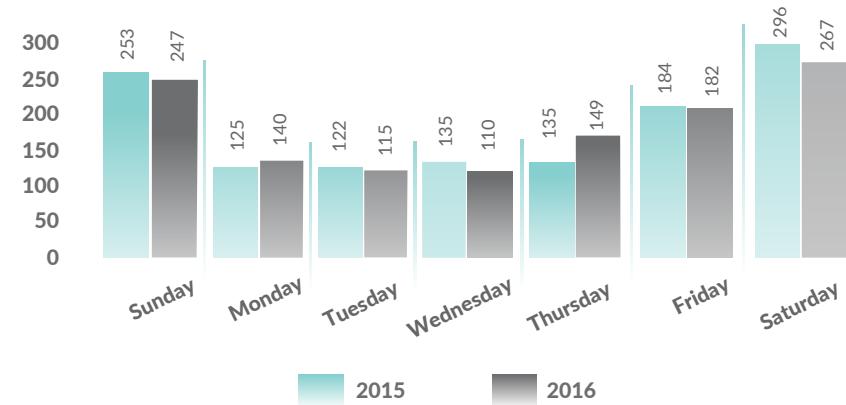


6.5 Roll-Over Crashes By Day Of Week

The number of roll-over crashes by day of week is displayed in Figure 33. It is evident that these types of road crashes occur mainly during weekends and that this has remained consistent for both 2015 and 2016. In 2016, about 58% of roll-over crashes occurred between Fridays and Sundays.

Similarly to 2015, about 59% of all roll-over crashes occurred during weekends. There were less roll-over crashes recorded on Tuesdays (10%) and Wednesdays (9%) as compared to the other days of the week.

Figure 33: Roll-over crashes by day of the week (2015 & 2016)



Section 7: MVA Fund Benefit Claims



7.1 Introduction

This section provides an analysis of the 2016 registered benefit claims, in comparison to 2015. The analysis includes the trend of registered claims, the distribution of the 2016 registered claims per month, claims by benefit type per month, analysis of the lodged claims in relation to the number of Case Coordinators at each Service Centre as well as claims that were repudiated during 2016.

The MVA Fund as per the MVA Fund Act No. 10 of 2007 is mandated to design, develop, promote and implement motor vehicle accident and injury prevention measures; fairly and reasonably provide assistance and benefits to a person who is injured in a motor vehicle crash; fairly and reasonably provide assistance and benefits to a person who suffers loss as a dependent of a person killed in a motor vehicle crash. The benefits that the Fund offers are subject to certain exclusions and limitations as stipulated in Section 26 of the Act.

The Fund's benefits include the following:

- a) Injury Grant
- b) Funeral Grant
- c) Loss of Support
- d) Loss of Income
- e) Medical and Non-Medical Reimbursement
- f) Medical Undertaking

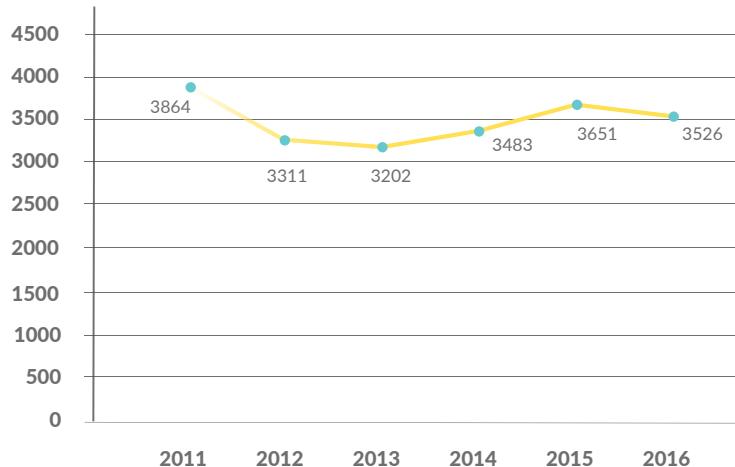
The Fund's desire is to have received all possible claims submitted within a period of three months from the date of crash. This will help with the speedy assistance of our clients as well as establishing the Fund's liability and exposure soonest.

The Act however makes provision for claimants to lodge claims within a period of one year, from the date of the crash. Prescription of claims however does not run against a minor and allows for up to the age of 22 at which a claim of a minor can expire.

7.2 Benefit Claims Per Year

Statistics indicate a downward trend in the number of personal benefit claims. As illustrated in Figure 34, even though a downward trend was observed for other years, during 2015, a slight increase of 5% was observed as compared to 2014. Benefit claims reduced by 3% during 2016 as compared to 2015. On average, each year 3,506 benefit claims are lodged with the Fund.

Figure 34: Registered benefit claims (2011-2016)



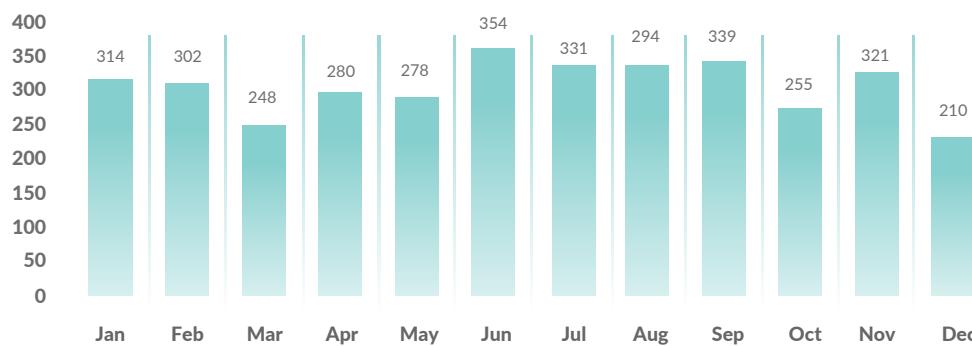
7.3 Benefit Claims Per Month

The number of registered benefit claims per month is displayed in Figure 35. As shown, the number of claims lodged in 2016 varied from month to month. The highest number of benefit claims were lodged during June (10%), followed by September (10%) and July with 9% of the total annual claims.



The months with fewer benefit claims lodged were October (7%), March (7%) and December with 6% of the total claims lodged during the year. An average of 294 benefit claims are lodged with the Fund each month.

Figure 35: Registered benefit claims per month (2016)



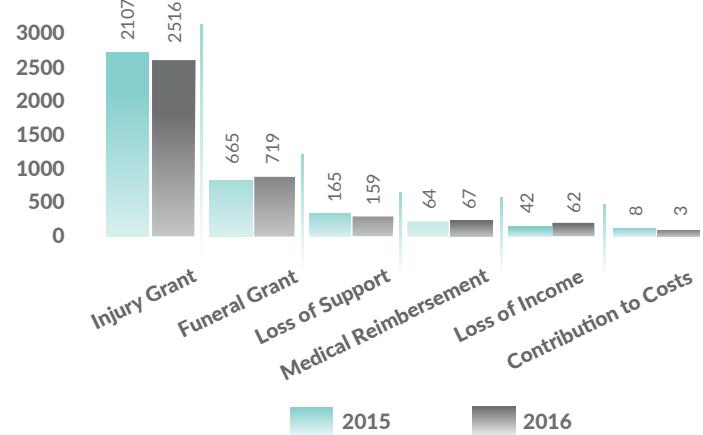
7.4 Claims By Benefit Type

Figure 36 displays the types of benefits and number of claims that were lodged for the years 2015 and 2016. Most of the benefit claims lodged during the two year period were for Injury Grant benefits, representing 74% in 2015 and 71% of claims lodged during 2016. This is a benefit offered to people who sustain injuries as a result of motor vehicle crashes. Funeral Grant claims are paid out to families of the deceased, and accounted for 20% of the benefits claimed during 2016.

Further, claims for Loss of Support accounted for 5% of the lodged claims. Loss of Support benefit is offered to the legal dependents of the deceased if the deceased was employed at the time of crash.

Medical Reimbursement is also offered to claimants, who for various reasons used their own funds for hospital bills and seek refunds from the Fund by submitting the claim as reimbursement. Medical Reimbursement accounts for (2%) of the total record, while Loss of Income benefit (2%) which is given to injured persons who, due to their injuries, were unable to earn an income from work.

Figure 36: Registered claims by benefit type (2011 & 2016)



7.5 Claims By Benefit Type, Per Month

Table 17 illustrates the number of lodged claims by benefit type, per month during 2016. For all the months, Injury Grant (71%) were the most common type of claim followed by Funeral Grant (20%).



Table 17: Monthly distribution of registered claims by benefit type (2016)

Months	Injury Grant	Funeral Grant	Loss of Support	Medical Reimbursement	Loss of Income	Contribution to Costs	Total
January	212	77	10	13	2	0	314
February	228	49	14	6	4	1	302
March	178	49	15	4	2	0	248
April	202	61	9	2	6	0	280
May	207	48	15	1	7	0	278
June	239	78	18	8	11	0	354
July	249	60	15	2	5	0	331
August	203	61	13	11	6	0	294
September	251	58	16	5	9	0	339
October	186	47	12	6	3	1	255
November	233	68	10	6	4	0	321
December	128	63	12	3	3	1	210
Total	2516	719	159	67	62	3	3526

7.6 Benefit Claims Per Service Centre

In efforts to widen its services throughout the whole country, the Fund established service centers in the following towns: Windhoek, Ongwediva, Rundu, Walvis Bay, Keetmanshoop, Otjiwarongo and Katima Mulilo. Figure 37 shows the number of claims that were registered at each service centre, as well as the number of Case Coordinators that are responsible for the registration and processing of claims. It further shows the average number of claims that each Case Coordinator handled during 2016.

The majority of the claims (44%) were lodged at the following service centres: Windhoek, followed by those submitted at the Ongwediva (29%) and Walvis Bay (7%). Less claims were lodged at Keetmanshoop and Katima Mulilo service centres, representing 5% and 4% of the total claims, respectively.

Figure 37: Claims per Service Centre ns number of Case (2011 & 2016)



7.7 Repudiated Claims

The number and factors leading to repudiated claims are displayed in Figure 38 below. As shown in the figure, a total of 75 claims that were lodged were repudiated due to various reasons. Most of the repudiated claims were lodged by unlicensed drivers at the time of crash (33%), followed by those that were submitted outside the prescribed time (29%). Additionally, 8% of the claimants were illegal immigrants, 8% of the claimants could not provide proof of indigence, and 7% of the claimants were claiming for non-motor vehicle accident related injuries.

Figure 38: Factors leading to repudiated claims (2016)



7.8 Medical Service Provider Claims

Table 18 below shows the number of Medical Service Provider claims per month for the period 2013–2016. The number of claims in this regard increased significantly by 58% between 2013 and 2014. However, a slight reduction of 2% was observed from 2014 to 2015. During 2016, Medical Service Provider claims increased with 6% from 24,549 recorded in 2015 to 26,113 in 2016. Furthermore, statistics indicate that in 2016, most of the service provider claims were received in January (13%), while the least number of claims were received in December (6%).

Table 18: Number of Service Provider claims per month (2013–2016)

Months	2013	2014	2015	2016
January	1800	2043	1591	3373
February	1352	2013	1480	1826
March	1263	1961	1772	1606
April	1324	1907	2211	1774
May	1666	2248	1436	1649
June	1341	1923	1693	2308
July	1307	2753	2699	2603
August	930	2156	2038	2215
September	1062	1931	2238	2397
October	1796	2301	2037	2359
November	1247	2025	2329	2547
December	728	1676	3025	1456
Total	15,816	24,937	24,549	26,113

Table 19 shows the monthly amount for accepted claims across a four year period. During these four consecutive years, a notable upward trend with regard to the cost of Medical Service Provider claims was observed.

For example, from 2013 to 2014, the amount claimed increased by 35% and a further 8% increase was observed between 2014 and 2015. For 2016, Medical Service Providers costs increased by 17% when compared to the previous year. In 2016, the highest claimed amount was recorded in January with a record of 14%, which almost tripled in comparison to the previous years, whereas the least amount was recorded during March (5%). In 2016, a total of N\$ 169 million was paid for medical service provider claims.

Table 19: Expenses for Medical Service Provider claims (N\$) (2013-2016)

Months	2013	2014	2015	2016
Jan	8,207,327.57	9,092,081.30	9,358,242.63	23,171,104.16
Feb	5,986,657.57	11,005,624.37	7,883,535.96	10,291,720.41
Mar	6,259,326.27	8,862,545.54	11,263,720.64	8,561,999.30
Apr	9,669,316.80	10,774,939.63	10,774,939.63	9,375,916.94
May	8,714,207.12	12,764,869.85	7,256,294.86	10,099,291.19
Jun	7,197,443.64	13,060,163.30	11,311,422.99	16,879,313.79
Jul	10,124,372.05	12,192,666.56	16,131,592.66	17,279,607.95
Aug	5,626,469.50	11,623,738.91	11,691,505.12	15,627,551.00
Sept	7,677,658.15	11,622,130.44	16,637,718.43	14,952,359.76
Oct	9,444,185.05	11,956,135.65	11,751,263.21	15,304,268.50
Nov	11,507,045.93	11,042,995.30	11,235,413.41	18,540,693.98
Dec	9,486,828.18	10,695,207.02	19,801,097.41	9,673,405.00
Total	99,900,837.83	134,693,097.87	145,096,746.95	169,757,231.98



Section 8: Public Education and Accident & Injury Prevention Programmes



8.1 Product Knowledge

The Fund undertook to increase the public level of knowledge on the Fund's products by carrying out interventions to address the challenge of incomplete claims and the high number of claims submitted after the prescribed time. The claims that were incomplete were received mainly from Omaheke, Hardap and Kunene regions.

During 2016, public awareness campaigns were held in Omaheke, Hardap and Kunene regions regarding completion of claim forms and the time period to submit a claim to the Fund.

Through continuous assessments, the respondents' level of product knowledge stood at 76% during 2016, against a target of 75%. In addition to that, the Fund addressed the identified challenges through media platforms such as Facebook, radio interviews and posters.

8.2 Accident And Injury Prevention

Road traffic injuries are a major but neglected public health challenge that requires concerted efforts for effective and sustainable prevention. Of all the systems with which people have to deal with every day, road traffic systems are the most complex and the most dangerous system.

In Namibia a large number of people are killed in road crashes each year while many more are injured. Projections indicate that these figures will increase unless there is new commitment to prevention.

The MVA Fund underscores its concern that unsafe road traffic systems disadvantage national public health and development agenda. It contends that the level of road traffic injury is unacceptable and that it is largely avoidable. Therefore in an effort to reduce the escalating number of crashes and the detrimental consequences, an Accident and Injury Prevention and Public Education Strategy was developed in line with the United Nations Decade of Action for Road Safety 2011-2020. The strategy was crafted to inculcate road safety culture among all road users through targeted interventions with the primary aim to reduce occurrences of crashes, injury and death.

During 2016, the Fund carried out a number of programmes to improve positive road user behavior to obviate the escalation of road traffic crashes and the resultant effects such as injury and death. Interventions such as Work Place Road Safety, B1 and B2 Route Based Assessment and Pedestrian Road Safety Audits were performed under the Accident and Injury Prevention and Public Education Strategy. In-depth explanations of the abovementioned interventions follows below:

8.2.1 Route Based Assessment Along B1 And B2

For a number of years, Namibia has experienced a high number of road traffic crashes along the B1 and B2 highways. To appreciate the contributory factors, the MVA Fund in partnership with Worcester Polytechnic Institute from the United States of America (USA) conducted a Route Based Assessment.

Using the previous road accident and traffic volume data collected in 2013 and 2015 together with visual site evaluations/audits, four common causes of accidents were identified namely: animals, blind spots, over-speeding and lack of shoulders on the highways. Findings were shared with relevant stakeholders for consideration and implementation of corrective measures.

8.2.2 Pedestrian Road Safety Audit

During 2016, driven by more than 900 pedestrian related road traffic crashes recorded annually with an average of 189 pedestrians killed per year, the MVA Fund, City Police Traffic, Nampol Traffic, NRSC, RA Engineering Division, CoW Engineering Division, PSRSF, UNICEF and On-Screen Media Productions CC carried out a pedestrian Road Safety Audit along the top five (5) pedestrian crash prone streets in Windhoek.

The streets are Monte Christo Road, Independence Avenue, Mandume Ndemufayo Avenue, Matshithsi and Ongava streets respectively. Several shortcomings were identified, amongst others: Illegal structures on the road reserve, rubbles on the sidewalks, high curbs, un-demarcated pedestrian crossings, lack of shoulders, lack of speed humps, speeding and unpaved sidewalks just to mention but a few.

In response to some of the findings, the Fund in collaboration with the CoW Engineering Department demarcated five intersections by way of repainting pedestrian crossings which was part of the recommendations after the audit. Implementation of the recommendations will continue in 2017 and the future, in collaboration with road safety partners.

8.2.3 Work Place Road Safety

As a road safety tactic, corporate and organizational fleet is recognized to be of resilient interest to road safety advocates and has been known to be an effective approach to improve road user behavior within organizations and corporations. However, during 2016, Work Place Road Safety (WPRS) was only conducted in the first six months of the year where road safety awareness were measured at 86% (January to March) and 75% April-June 2016 respectively.



During July to December 2016, WPRS interventions focused on the Windhoek Pedestrian Road Safety and Festive Season Road Safety Campaigns (FSRSC).

8.3 Festive Season Road Safety Campaign 2015/2016

Reality has it that the festive season is punctuated by increased congestion on the national roads, particularly on the highways. Annual school holidays, the closing of the majority of industrial sectors and major events coupled with goodwill and festivities all contribute to the peak traffic flow.

Generally, during this time of the year, the road transport remains the absolute method of travelling yet many road users end up being either reckless or impatient resulting into road rage leading to injuries and even deaths of innocent drivers, passengers and pedestrians who become casualties of such circumstance.

Subsequently, it is during this time when motorists are urged to utilize this limited shared public space cautiously. As a result, since the year 2005, the National Road Safety Council (NRSC) and the Motor Vehicle Accident Fund (MVA Fund) as well as partners supported by the private sector successfully launched the Xupifa Eemwenyo which was later named the Festive Season Road Safety Campaign (FSRSC). Hence, the 2016/17 FSRSC was no exception to clamp down on risky road behavior. This was launched in Rundu on 20 November 2016.

Road safety is a shared responsibility and for over the years, the private sector has once again confirmed the need to work and pull together in the same direction by making a significant contribution towards the quest to save lives on our national road network. During 2016/17 FSRSC, an amount of N\$ 3,119 867.00 was raised through the private sector towards law enforcement activities, emergency response and traffic safety education with a common purpose to reduce road carnage in Namibia.

Significant efforts have been made with the aim of reducing road crashes in Namibia. These include building road safety management capacity; improving the safety of road infrastructure and broadening transport networks; developing the safety of vehicles; enhancing the behavior of road users and improving post-crash care as required by the World Health Organization's Decade of Action. However, regardless of these efforts, fatalities in 2016 as a result of road crashes are still on the increase with only a slight reduction in crashes and injuries.



Section 9: Recommendations

The Following Recommendations Are Therefore Suggested:

- a) In order to achieve the 2020 SDG targets of reducing motor vehicle casualties by 50%, all road safety stakeholders should redouble their efforts and perhaps change their strategic interventions i.e. road safety interventions should target the public more and not just companies as most of the vehicles involved in crashes are privately owned.
- b) The Fund should intensify its public education programmes, which are aimed at increasing public awareness on its products and benefits, in order to ensure that claims are submitted within the prescribed time.
- c) There is an urgent need to strengthen national emergency response capacity in order to reduce injuries and deaths occurring in regions with higher number of injuries.
- d) There is a need to strengthen the appropriate use of available statistics, e.g. weekly, monthly and annual reports to guide information based interventions.
- e) Targeted road safety education programmes for young people, passengers and male drivers are advised, with the aim of enhancing road safety knowledge among high risk populations in terms of road crashes.
- f) An in-depth investigation on the roll-over crash types is required, with the view of gaining an exhausted understanding of the causes of these types of crashes in Namibia. Case studies could be done with regions where there is low roll-over crashes.
- g) There is a need to ensure compliance with speed limits and reduce drink-drive behavior to ensure safe driving practices.
- h) Investment in road side countermeasures, such as rumble strips and barrier systems are required to minimize the risk of loss of control crashes with a view to reduce roll-over crashes.
- i) A pilot study of centre-line barriers is recommended as a means of reducing head-on crashes on high speed roads.
- j) A new focus on public transport safety and truck driver safety is recommended, especially to address overloading, vehicle tyre condition and driver fatigue.
- k) Policy adjustment relating to passenger safety, i.e. public transport vehicles to be fitted with seatbelts and survey to obtain baseline data on seatbelt compliance.
- l) Enforce speed calming measures/speedhumps and 40 km zones within high density population areas.
- m) Enforce cycling safety to arrest new trends in fatalities by road user category.
- n) Regional/District Hospitals to be upgraded to treat first level spinal cord injuries (SCI) and traumatic brain injuries (TBI) to improve trauma capacity.



Appendix A: 2016 Vehicle Population in Namibia (Source: Roads Authority)

Road Authority	All other and unknown vehicles	Buses, bus trains, midibuses	Caravans	Heavy load trailers GVM > 3500kg	LDVs, panel vans, other light load vehs GVM <= 3500kg	Light load trailers GVM <= 3500kg	Minibus	Motor cars and station wagons	Motorcycles, quadricycles, tricycles	Other self-propelled vehicles	Trucks (heavy load vehicles GVM > 3500kg)	Total
Aranos	13	1	6	15	506	130	7	185	20	20	40	943
Bethanie	3		1	11	183	43	5	76	6	11	26	365
Eenhana	117	12		47	3859	110	58	2276	15	286	93	6873
Ex-Presidential								2				2
GRA	56	161	50	137	5466	217	424	2167	170	261	508	9617
Gobabis	44	12	58	201	3569	738	119	2116	107	279	339	7582
Grootfontein	60	6	12	124	2276	357	123	2192	75	205	238	5668
Karasburg	27	21	9	60	1045	276	31	700	35	60	138	2402
Karibib	19	3	7	13	677	124	48	618	23	71	54	1657
Katima Mulilo	15	9		52	1752	248	137	3312	18	116	106	5765
Keetmanshoop	80	14	35	68	3000	670	98	2639	148	173	220	7145
Khorixas	18		1	1	519	46	21	355	2	16	21	1000
Luderitz	23	29	5	88	887	161	53	1221	50	61	62	2640
Maltahohe	9	2		5	249	60	8	139	5	8	16	501
Mariental	100	10	27	198	2649	697	95	1782	74	241	303	6176
NPS	1	26		3	102	5	13	77	4		14	245
Nkurenkuru	11	1		9	206	10	5	213	1	34	11	501
Okahandja	62	34	39	465	2344	584	177	2479	115	225	451	6975
Okakarara	6		1	10	463	25	17	240	1	33	31	827
Omaruru	37	6	16	60	1054	231	84	862	61	79	89	2579
Ondangwa	156	18	8	201	4735	255	117	3808	15	563	261	10137
Opuwo	19	1	4	8	1639	105	48	696	9	53	53	2635
Oranjemund	30	32	11	29	1165	250	49	1180	61	113	90	3010
Oshakati	484	78	20	290	14198	844	318	11801	67	1254	651	30005
Otavi	8	1	2	85	352	76	20	228	15	56	68	911
Otjinene	1				184	9	7	46		6	7	260
Otjiwarongo	60	31	53	257	3567	854	220	3745	113	257	442	9599
Outapi	142	20	1	52	5417	228	82	2560	12	302	119	8935
Outjo	78	17	15	167	1513	331	84	1034	61	137	297	3734
Rehoboth	41	14	18	18	2157	308	109	2340	38	87	96	5226
Ruacana	10	1		8	465	27	3	338	1	21	14	888
Rundu	174	48	2	112	3457	338	304	4555	30	614	259	9893
Swakopmund	216	182	76	329	6142	1694	587	9806	605	706	656	20999
Tsumeb	115	61	26	306	2625	565	162	2725	147	243	358	7333
Usakos	7	2	7	4	247	48	25	229	7	15	15	606
Walvis Bay	166	120	69	883	6347	1284	358	10286	531	842	1125	22011
Windhoek	2003	1079	480	3458	50704	9735	3179	79012	2789	6803	6394	165636
Grand Total	4411	2052	1059	7774	135720	21683	7195	158040	5431	14251	13665	371281

Notes



Notes



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