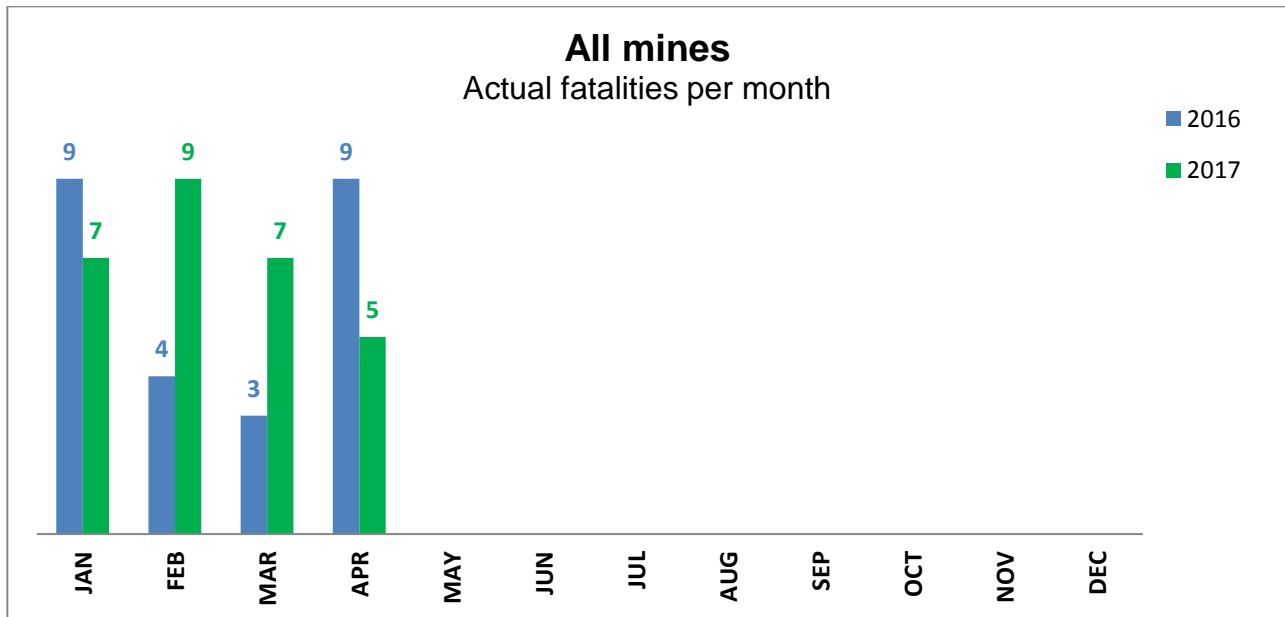




1. OVERALL FATALITIES PER MONTH

During the month of April 2017, **five (5)** fatalities were reported whilst during the same period in 2016 a total of **nine (9)** mine workers were fatally injured. Fatalities reported for the year up to April 2017 were **twenty eight (28)** while **twenty five (25)** were reported over the same period in 2016. This translates to an increase in fatalities of 12% year on year.



2. STATISTICS OF FATALITIES BY REGION

The table below illustrates the progressive performance of each region with regard to fatalities. During the month of April 2017, **seven (7)** of the **ten (10)** regions managed to mine without a fatality. The Northern Cape, Eastern Cape, Kwa-Zulu Natal and North West (Klerksdorp) regions last reported a fatality on 09/11/2016, 11/10/2015, 05/02/2015 and 25/07/2016 respectively.

	WC	NC	FS	EC	KZN	MPU	LP	GP	NW-KD	NW-RB	TOT
Jan	2	0	1	0	0	1	0	1	0	2	7
Feb	0	0	3	0	0	1	1	2	0	2	9
Mar	0	0	1	0	0	2	2	0	0	2	7
Apr	0	0	0	0	0	2	0	2	0	1	5
Total	2	0	5	0	0	6	3	5	0	7	28

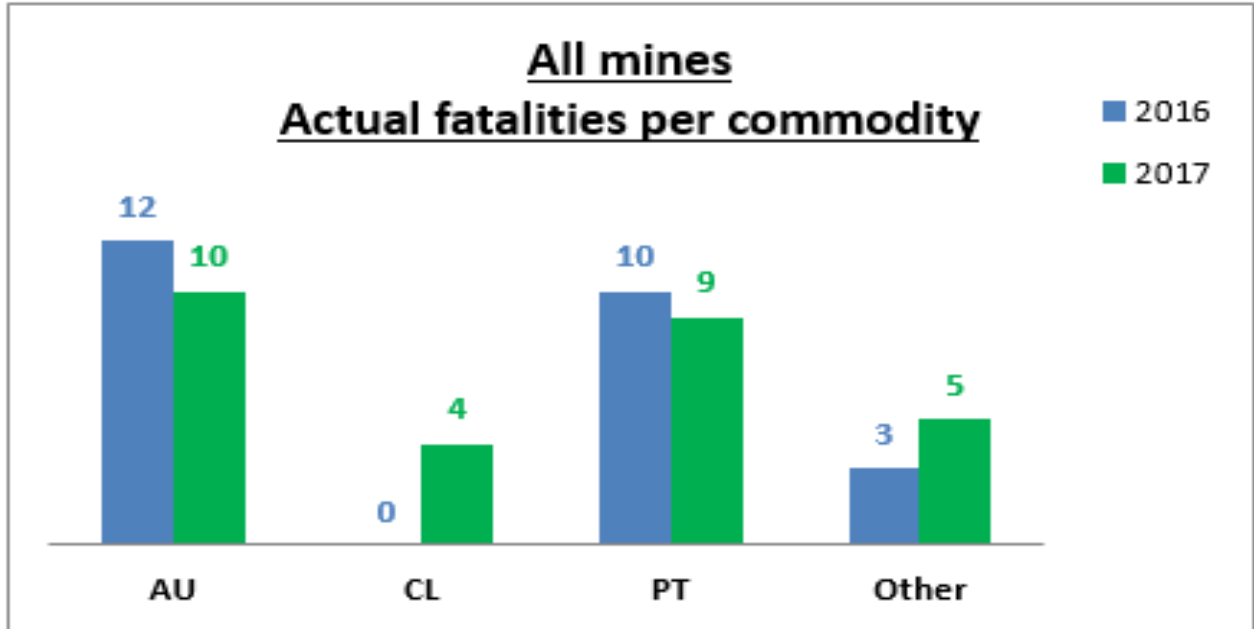
3. ANALYSIS OF FATALITIES BY COMMODITY

For the purpose of the analysis, commodities are grouped into gold (AU), platinum (PT), coal (CL) and other mines (i.e. chrome, manganese, diamonds, stone, sand, brickworks, etc.).

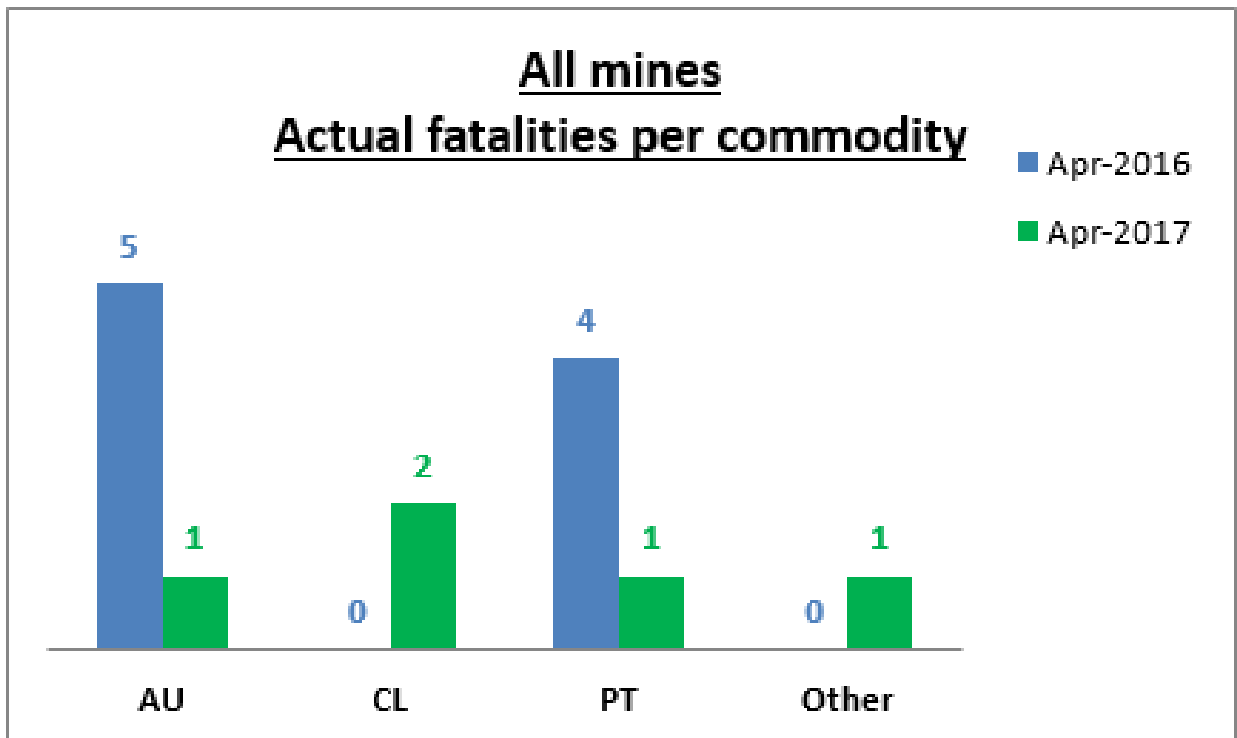
- 3.1 The comparison of fatalities year to date for April 2016 and 2017 are reflected on the graph below and shows an increase in fatalities in the coal and other mines sectors of 400% and



67% respectively, while the gold and platinum sectors show a decrease of 17% and 10% respectively.

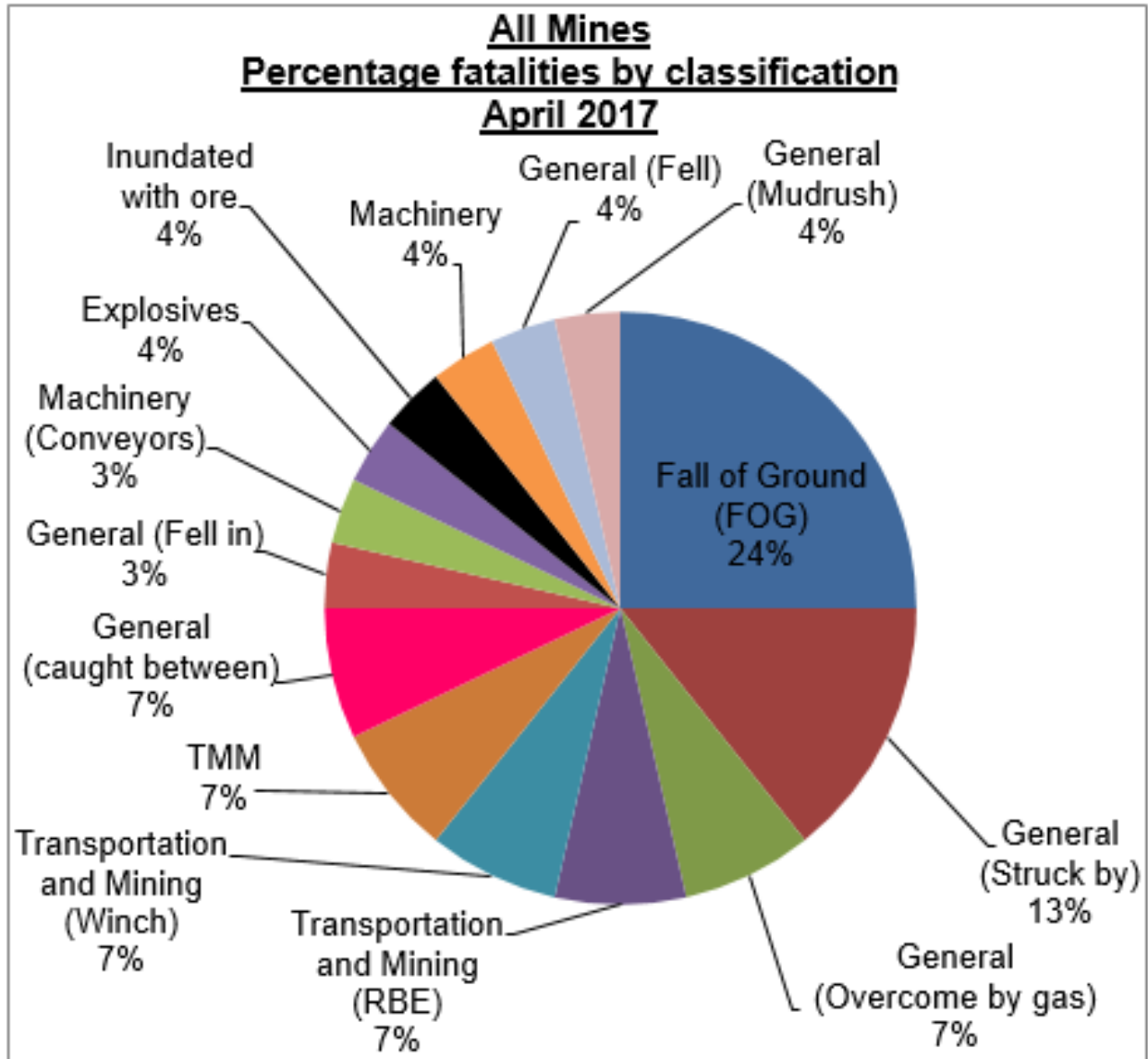


3.2 In April 2017, the coal sector reported **two (2)** fatalities while the gold, platinum and other mines sectors reported **one (1)** fatality each.





4. ANALYSIS OF FATALITIES BY CLASSIFICATION



4.1 FOG (Fall of Ground) (24%)

There were **seven (7)** fatalities reported in this category this year. **Two (2)** were reported in April 2017, one (1) each at the gold and platinum mines. In the first accident, the now deceased a Stoping Team Leader was fatally injured in a fall of ground accident that occurred in a stope underground. In the second accident, which resulted in a subsequent fatality, the now deceased a Team Leader was seriously injured in a fall of ground accident on 08 April 2017 and succumbed to his injuries on 21 April 2017.

4.2 General (Struck by) (13%)

There were **four (4)** fatalities reported in this category this year, **three (3)** in the gold mines and **one (1)** in a coal mine. One (1) was reported in April 2017. The now deceased an Assistant Boilermaker was fatally injured when he was hit and pushed by the chute against the handrails of the platform he was standing on whilst removing the bolts that



were cut by the Boilermaker. Whilst removing the bolts with a chisel and hammer, the chute lifted up on one side and fell on the platform that the now deceased was standing on.

4.3 General (Overcome by gas) (7%)

There were **two (2)** fatalities reported in this category this year, both at a refinery. None were reported in April 2017.

4.4 Transportation and Mining (RBE (Rail Bound Equipment)) (7%)

There were **two (2)** fatalities reported in this category this year, **one (1)** at a gold mine and a platinum mine each. None were reported in April 2017.

4.5 Transportation and Mining (Winch) (7%)

There were **two (2)** fatalities reported in this category this year, **one (1)** at a gold mine and a platinum mine each. None were reported in April 2017.

4.6 Trackless Mobile Machinery (TMM) (7%)

There were **two (2)** fatalities reported in this category this year, **one (1)** at a gold mine and a chrome mine each. None were reported in April 2017.

4.7 General (Caught between) (7%)

There were **two (2)** fatalities reported in this category this year, one (1) at a coal mine and a diamond mine each. One (1) was reported in April 2017 at a diamond mine. The now deceased a Miner was fatally injured when he was trapped between two steel structures. He had positioned himself between two steel structures to make way for a LHD to pass. Whilst the LHD was passing, it hooked one steel structure, thereby trapping the now deceased between the two structures.

4.8 General (Fell in) (4%)

There was **one (1)** fatality reported in this category this year at a gold mine. None were reported in April 2017.

4.9 Machinery (Conveyors) (4%)

There was **one (1)** fatality reported in this category this year at a colliery. None were reported in April 2017.

4.10 Explosives (4%)

There was **one (1)** fatality reported in this category this year at a platinum mine. None were reported in April 2017.



4.11 Inundated with ore (4%)

There was **one (1)** fatality reported in this category this year at a gold mine. None were reported in April 2017.

4.12 Machinery (4%)

There was **one (1)** fatality reported in this category this year at a diamond mine. None were reported in April 2017.

4.13 General (Fell) (4%)

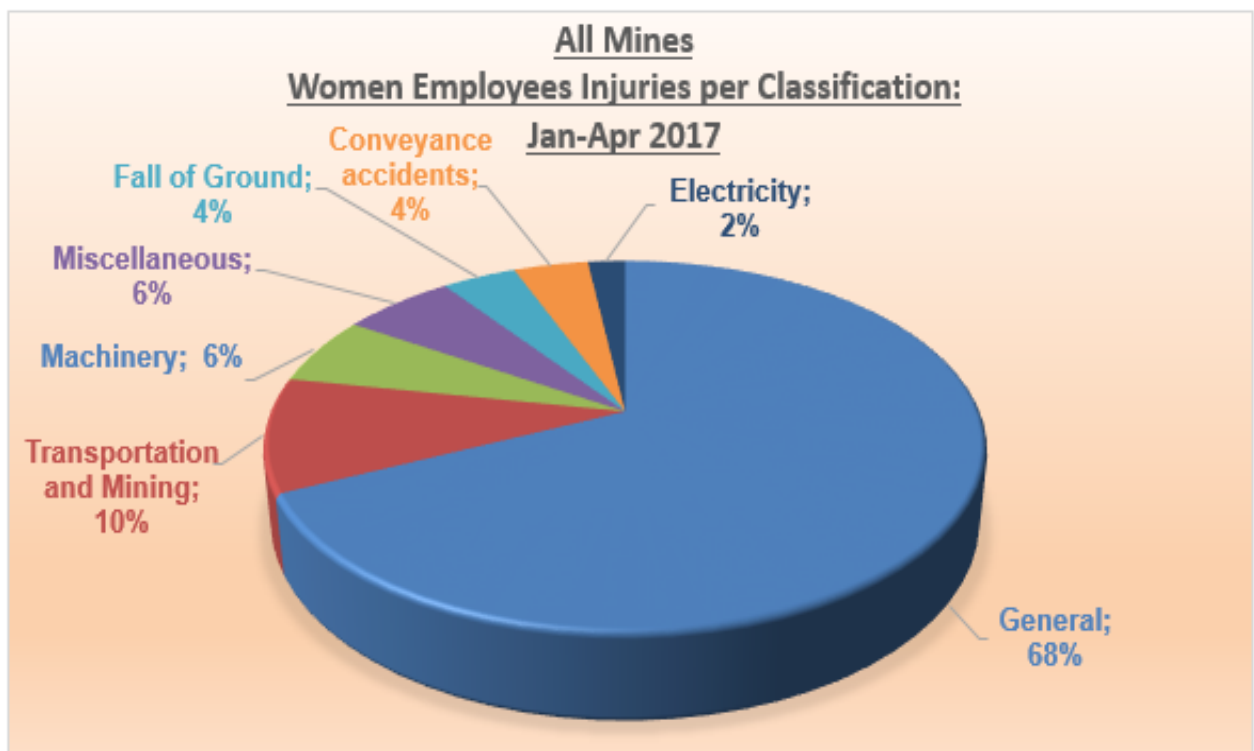
There was **one (1)** fatality reported in this category this year at a platinum mine. None were reported in April 2017.

4.14 General (Mudrush) (4%)

There was **one (1)** fatality reported in this category this year in April 2017 at a coal mine. The now deceased a Proto Team member was fatally injured when he was overrun by a mud rush inside the coal silo that he was cleaning.

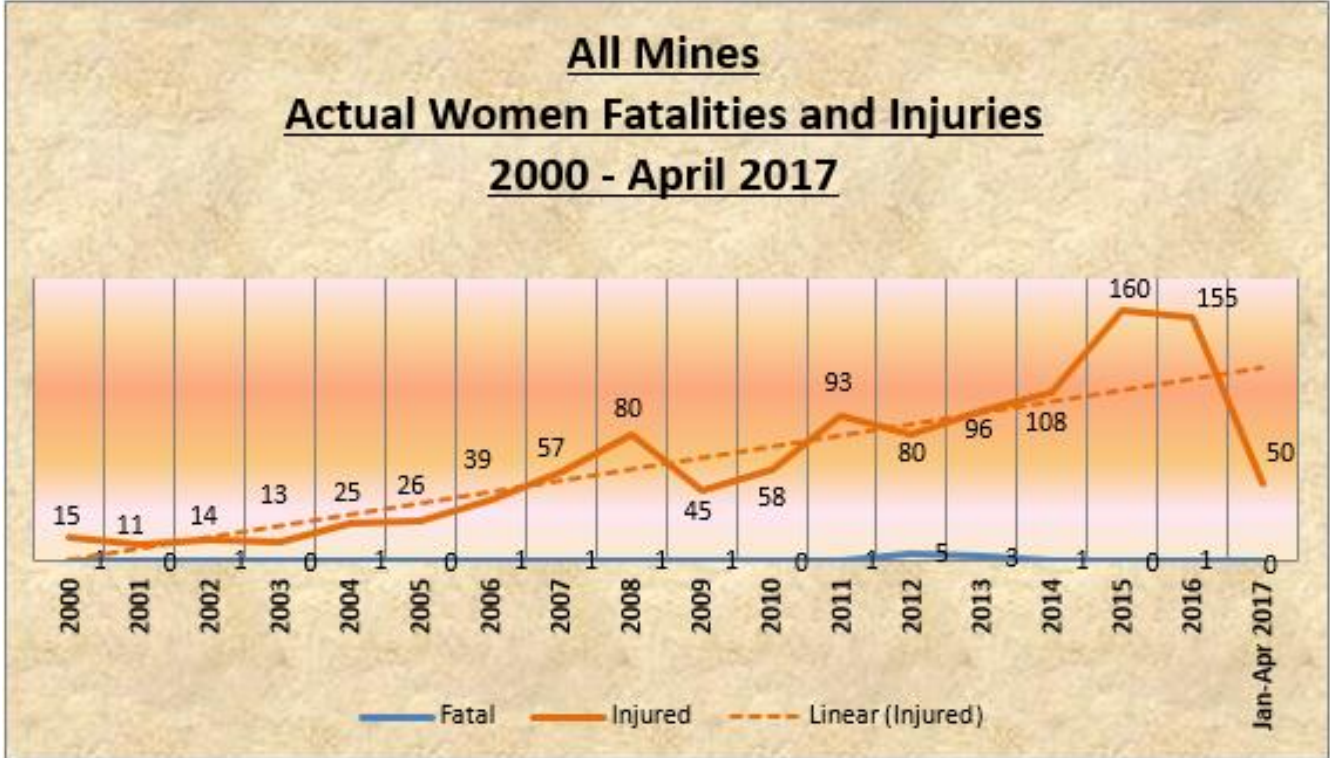
4.15 Women Employees

The number of women employees has steadily increased in the South African mining industry and the graph below shows a classification of injuries to women employees across all commodities from 2000 to April 2017:

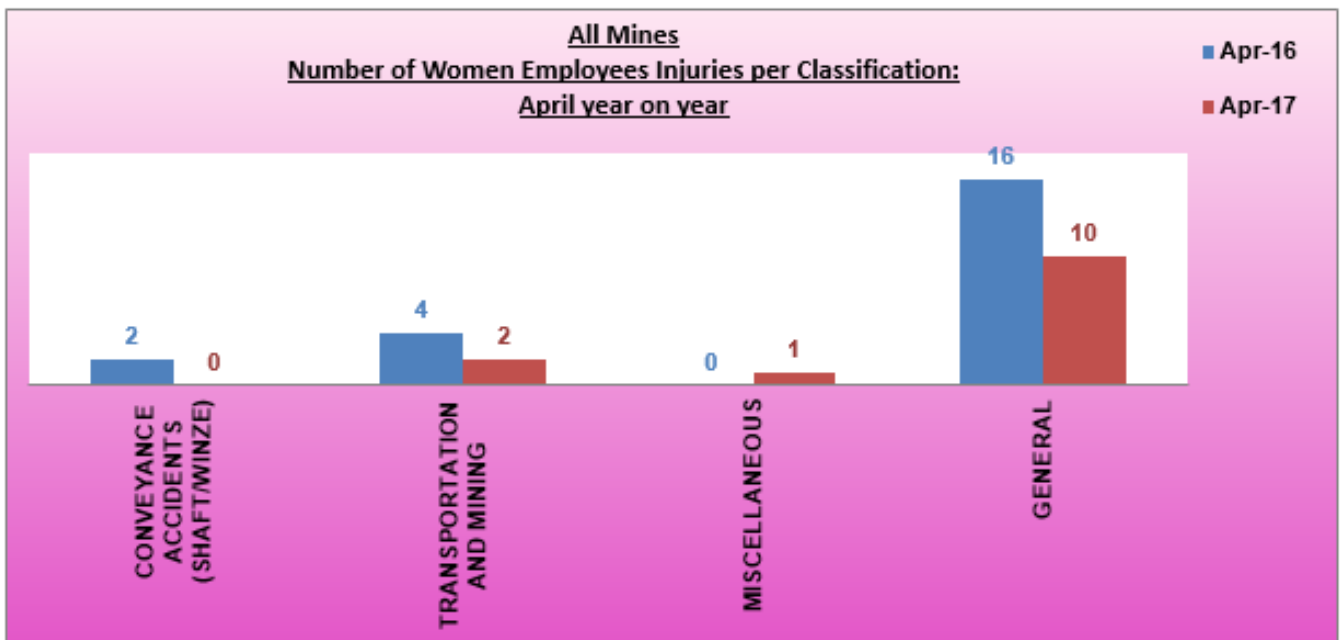




The graph below shows the number of injuries and fatalities to women employees across all commodities since 2000 to April 2017:



The graph below shows the comparison of injuries to women employees across all commodities in April 2016 and April 2017:





5. FATALITIES AND INJURIES

5.1 FATALITIES

	Jan-Apr 2016	Jan-Apr 2017
Gold Mines	12	10
Anglo Gold Ashanti	3	0
Western Deep Levels East	3	0
Sibanye Gold	5	3
Beatrix 3 MU1	0	2
Cooke 3	0	0
Ezulwini	1	0
Rand Uranium	1	0
Kloof	1	1
Beatrix West Unit 3	1	0
Rand Uranium	1	0
Gold Fields	0	2
South Deep: Twin Shaft	0	2
Harmony	4	2
Masimong	2	1
Bambanani	0	1
Kusasaletu	1	0
Phakisa	1	0
Other Gold Mines	0	3
Evander Gold Mine	0	1
DRD Gold: Ergo Mining	0	1
Fairview Gold Mine	0	1
Platinum Mines	10	9
Impala	5	3
20 Shaft	0	1
Marula Platinum-Clapham Shaft	0	1
1 Shaft	0	1
14 Shaft	5	0
Lonmin	1	2
K3 Shaft	0	1
Newman Shaft	0	1
Marikana	1	0
Anglo Platinum	3	1
Tumela Mine	2	1
Khuseleka	1	0



	Jan-Apr 2016	Jan-Apr 2017
Other Platinum Mines	1	3
Northam Platinum	0	1
Atlatsa Resources	1	1
Sibanye Platinum	0	1
Coal Mines	0	4
Anglo Thermal Coal	0	1
Goedehoop Colliery	0	1
Other Coal Mines	0	3
Bankfontein Colliery	0	1
Matla Colliery	0	1
HCI	0	1
Other mines	3	5
Mosselbaai Refinery	0	2
Kolomela	1	0
Sishen	1	0
Blaaubosch Diamond Mine	0	1
Sefateng Chrome	0	1
PPC	1	0
Petra Diamonds	0	1
TOTAL	25	28

5.2 MINE INJURIES

The table below reflects the number of injury accidents that were reported for January to April 2016 and 2017 per the classification of the accident.

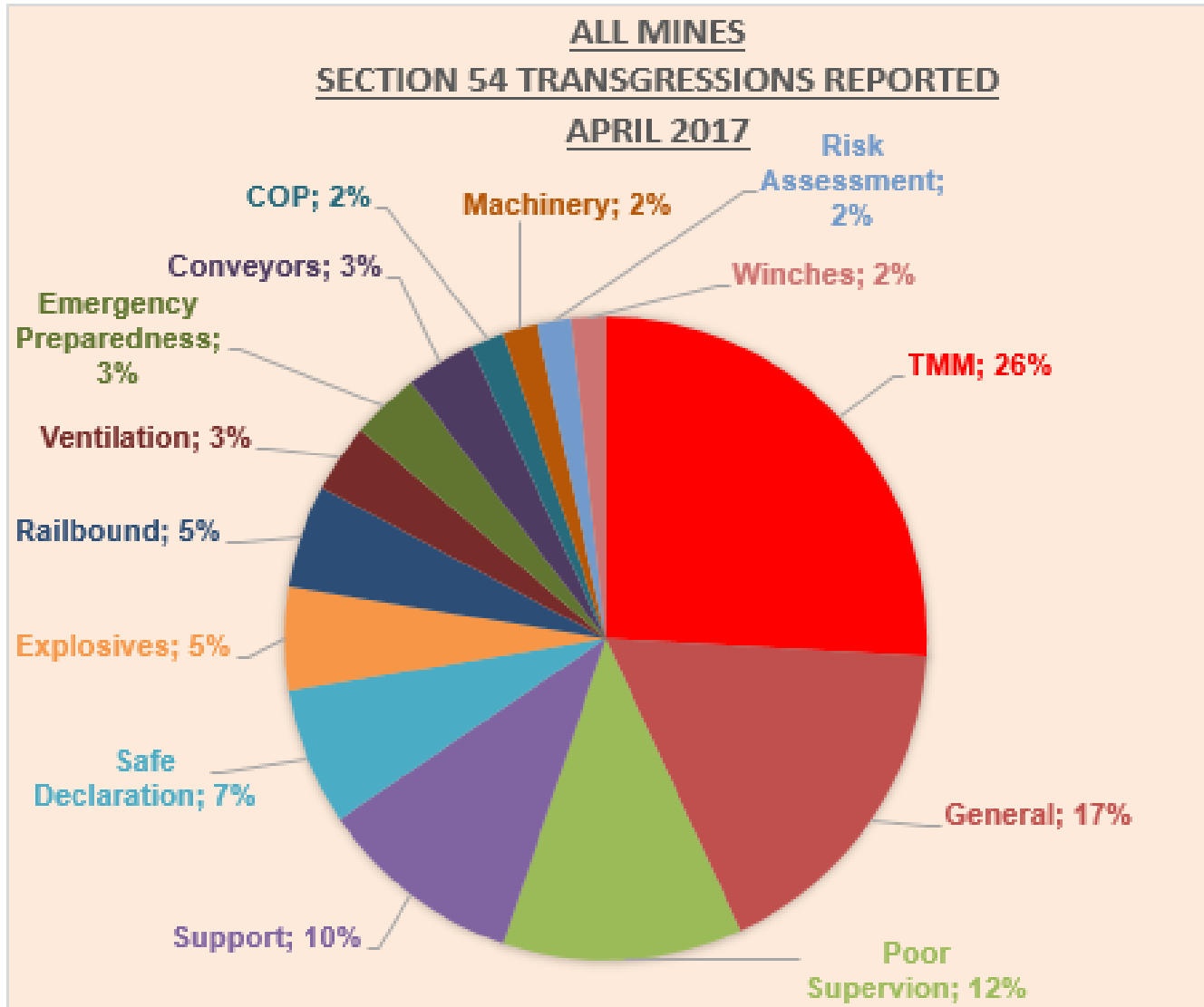
	INJURIES		
	Jan-Apr 2016	Jan-Apr 2017	%change
FALL OF GROUND	168	145	-14
Rockburst	27	25	-7
Strainburst	20	12	-40
Gravity	121	108	-11
MACHINERY	60	68	13
Conveyor belts	16	15	-6
Drives, belts, chains	7	7	0
Portable power tools	31	30	-3
Other	6	16	167
TRACKBOUND TRANSPORT	68	51	-25
Locomotive	19	8	-58
Locomotive drawn vehicle	16	16	0



	Jan-Apr 2016	Jan-Apr 2017	%change
Rerailing	3	2	-200
Coupling/uncoupling	10	10	0
Rocker arm shovel	8	6	-25
Personnel transport	4	4	0
Hand trammed	7	3	-57
Other Transport	1	2	100
WINCHES	33	42	27
Scraper Winch Installation	28	30	7
Single drum winch	0	4	300
Double drum winch	4	5	25
Mono rope/rail	1	3	200
TRACKLESS MOBILE MACHINES	54	36	-33
Mechanical loaders	5	4	-20
Tractor/trailer	1	2	100
Coal mining machines	3	0	-300
Transporters	16	12	-25
Motor vehicles	8	6	-25
T&M lifting machines	10	4	-60
T&M mobile drilling machines	8	6	-25
Other TMM	3	2	-33
GENERAL	490	442	-10
Fall of material/rolling rock	64	73	14
Manual handling of material	161	134	-17
Manual handling of mineral	18	22	22
Falling in/from	21	11	-48
Slipping and falling	155	119	-23
Burning and scalding	9	12	33
Splinters	10	9	-10
Dust, gas and fumes	2	19	850
Inundation/drowning	1	2	100
Struck by ventilation door	8	4	-50
Struck by any object manual handling	41	37	-10
Conveyance accidents (shaft/winze)	12	16	33
Electricity (Not causing fires)	5	2	-60
Fires	2	3	50
Explosives	5	3	-40
Occupational Disease	1	0	-100
Miscellaneous	30	33	10
TOTAL	927	841	-9



6. SECTION 54 TRANSGRESSIONS REPORTED DURING THE MONTH



6.1 TMM (Trackless Mobile Machinery) (26%)

This category of transgressions accounted for most of the section 54 transgressions observed in April 2017 and the areas covered were:

- vehicles Proximity Detection System (PDS) was not installed;
- an Excavator was observed with leaking hydraulic and engine oil, the Operator was not licensed, the screen was broken and doors were not closed as there was no air conditioning;
- a Bobcat skidsteer was not fitted with an enclosed driver cabin and no air conditioner;
- there were no measures in place to prevent unauthorised access to or operation of trackless mobile machinery, where operators were not signing in the keys at the start of shift, operators were not returning the keys at the start of the shift, security personnel



issuing the keys were not trained and there was no over inspection conducted to ensure compliance;

- the TMM operator had left the machine idling;
- external trucks Operators had come out of the machines without proper PPE (hard hat) "No Go" item;
- Mine Health and Safety Act Section 11(1)-(4) was not complied with regarding safe operation of Trackless Mobile Machinery;
- all TMM operators operated without wearing safety belts "No Go" item;
- 6. the TMM operator operated the TMM without the reverse alarm - "No Go" item;
- TMM operator was observed operating the TMM without completing the pre use checklist - "No Go" item;
- external TMM's were observed operating without using safety belt, no stop blocks, no reverse alarm, brake, head lights and indicator lights not working and no licence - "No Go" item;
- the TMM Operator was observed parking the TMM without the drivers licence (permit) - "No Go" item;
- another TMM Operator was operating the TMM without the drivers licence (permit) - "No Go" item;
- the licence for the TMM operator did not comply with regulation 8.10 (23.7) of the Mine Health and Safety Act;
- there were no measures in place to prevent unauthorised access to or operation of trackless mobile machinery regarding key control for TMM's, where operators were not signing in the keys at the start of shift, operators were not returning the keys at the start of the shift, the key register was last signed on 14/01/2017 for only two TMMs, Security personnel was issuing and signing for the keys as Foreman was not trained and there was no over inspection conducted to ensure compliance; and
- the drill rig used on side had no pre-use checklist and the Operator did not have an operating licence.

6.2 General (17%)

The areas covered in this category of transgressions were:

- an area with bad sidewall conditions was observed;
- there was no highwall stability control system, no risk assessment for highwall monitoring, employees were not trained for working at height and no safety harnesses were provided to employees;
- the Oxy-Acetylene bottles trolley was observed in the section not in use and not attended to. The fire extinguishers on the trolley had passed their yearly service date and not inspected in 2017;
- presence of geological features (domes) was observed in the panel;
- mine operating procedure was not addressing alcohol testing for employees before commencement of work;
- there were no qualified personnel appointed to do the job according to training;
- excessive mud was observed in the crosscuts and haulage;
- the mining direction in the crosscut was changed to blast the timber bay and this had resulted in fractures that created block ground in the sidewall of the crosscut;



- there was excessive water flowing from the box in the crosscut; and
- Diesel Attendant at the bay fuelling the machines was observed without proper PPE (safety shoes, hard hat etc.) "No Go" item.

6.3 Poor Supervision (12%)

The areas covered in this category of transgressions were:

- a Shiftboss had taken over a gang as a Miner, whilst carrying on as a Shiftboss at the same time and the appointment logbook was not produced on request;
- the Chairlift Electrical Foreman could not explain the operation of the reverse relay and how to inspect its operation;
- the Belt Supervisor did not know the reason for doing a checklist before operating a conveyor belt and the checklist was not in place;
- no permission had been granted under the Mine Health and Safety Act Regulation 2.13.12 (proper operation and running of machinery and erection, re-erection, moving or removal of machinery not used for the conveyance of persons);
- inadequate key control was observed;
- poor management of contractors was observed, where contractors were allowed to work unsafely;
- transgressions observed in the in the previous inspection had not been rectified;

6.4 Support (10%)

The areas covered in this category of transgressions were:

- temporary support in the crosscut was installed on top of broken ore, against mine standard;
- a brow which was not demarcated was not supported as per standard;
- protruding roofbolts were observed;
- substandard support was observed;
- roofbolts and sticks were not within mine standards; and
- Camlock jack was installed 1.5m from the face instead of 0.5m, limit roofbolt support was installed at 1.5m before the face instead of a maximum distance of 0.5m and cement packs were installed at 4.9m apart instead of a maximum of 3.5m for a bed winch establishment.

6.5 Safe Declaration (7%)

The areas covered in this category of transgressions were:

- the Shiftboss had not counter-signed the safe declaration of the crew after over-inspecting the working place;
- the drilling area was declared safe for drilling and indicated that the safety berm on the crest was available while it was not. There were no measures to ensure that the Drill Rig Operator and the Assistant were safe as they were working within the crest area;
- loose rocks were observed on the high wall close to where loading was taking place. The area was declared safe and indicated that no activity or person would be working /



travelling 5m close to the toe of the high wall, but no measures were put in place to avert machines or people from entering within the 5m distance from the toe; and

- safe declaration was conducted and hazards identified were not rectified.

6.6 Explosives (5%)

The areas covered in this category of transgressions were:

- poor control and management of explosives was observed;
- there were no measures in place to ensure that explosives were not leaving the mine premises; and
- the Blasting Assistant was found with explosives in the panel while drilling was still taking place.

6.7 Railbound (5%)

The areas covered in this category of transgressions were:

- there was no means provided underground to test the functionality of locomotive Proximity Detection System (PDS) before operation of a locomotive, Locomotive Operators were not trained to test the functionality of the PDS, PDS was not incorporated in the checklist and Locomotive Operators were not signing for the Loco PDS when collecting and returning the units;
- the Loco Driver could not explain the items on the checklist and did not understand the "go" and "go but" items; and
- a mechanical loader was observed not spragged in the crosscut.

6.8 Ventilation (3%)

The areas covered in this category of transgressions were:

- drilling activities were taking place while air velocity was 0.4m/s and temperatures were 28.8°C/29.9°C and the mine did not have any Heat Stress Management in place or acclimatised employees to work in areas with wet bulb temperatures above 27.5°C; and
- the ventilation standards were not addressing what employees needed to do if the wet bulb temperature limit of 27.5°C was exceeded.

6.9 Emergency Preparedness (3%)

The areas covered in this category of transgressions were:

- a refuge bay was not life sustaining in that the communication radio inside the refuge bay was tested and could not connect to the control room, there was no sufficient supply of potable water and the above two findings were brought to the attention of the employer according to the inspection report dated 5 January 2017; and
- Self-Contained Self-Rescuer units were not SABS (South African Bureau of Standards) approved.



6.10 Conveyors (3%)

The areas covered in this category of transgressions were:

- unsafe conveyor belt usage/practice was observed; and
- unsafe conveyor belt usage/practice was observed (second incident at another operation).

6.11 COP (Code of Practice) (2%)

The area covered in this category of transgressions was that mandatory Code of Practice for Emergency Preparedness and Response was outdated.

6.12 Machinery (2%)

The area covered in this category of transgressions was that poor control of lifting machinery was observed.

6.13 Risk Assessment 2%)

The area covered in this category of transgressions was that inadequate mine procedure for enforcement of risk assessment was observed.

6.14 Winches (2%)

The area covered in this category of transgressions was that winch signalling wires were not covering the entire length of the scraper paths.

7. OCCUPATIONAL MEDICINE

7.1 Overall occupational diseases/illness per month

During April 2017, the regions reported a total of 202 occupational diseases/illness from Health Incident Reports (HIRs), when compared to a total of 226 reported during the same period in 2016.

7.2 Analysis of occupational disease trends by region

There is an overall reduction of 11% in the total occupational diseases/illness reported by eight regions during April 2017 when compared to the total of cases reported by eight regions during the same period in 2016.

The table and graph below illustrate the progressive performance of each region with regards to the number of occupational diseases/illness reported on HIRs. In April 2017, Free



State reported most cases, followed by North West Rustenburg, Gauteng, Mpumalanga, Northern Cape, North West Klerksdorp, KwaZulu-Natal and Limpopo regions. In April 2016, North West Rustenburg reported most cases followed by Free State, Gauteng, Mpumalanga, Western Cape, Northern Cape, North West Klerksdorp, and KwaZulu-Natal regions. Eastern Cape and Western Cape regions did not report any occupational diseases/illness in April 2017. Eastern Cape and Limpopo regions did not report any occupational disease/illness during the same period in 2016.

7.3 Analysis of Health Incident Reports per common disease group

7.3.1 Pulmonary tuberculosis (PTB)

Pulmonary tuberculosis (PTB) cases have increased by 21% when compared to the same period during the previous year.

7.3.2 Silicosis

Silicosis cases reported have decreased by 45% when compared to the same period during the previous year.

7.3.3 Noise-induced hearing loss (NIHL)

Noise-induced hearing loss (NIHL) cases have decreased by 32% when compared to the same period during the previous year.

7.4 Conclusion

The analysis of occupational disease trends from the health incident reports show an overall decrease on occupational disease reported when compared to the same period of the previous year. It must also be noted that reported occupational diseases/illness are based on the system of medical surveillance which is not conducted at the same time on mines.



Occupational Health and Safety Report:

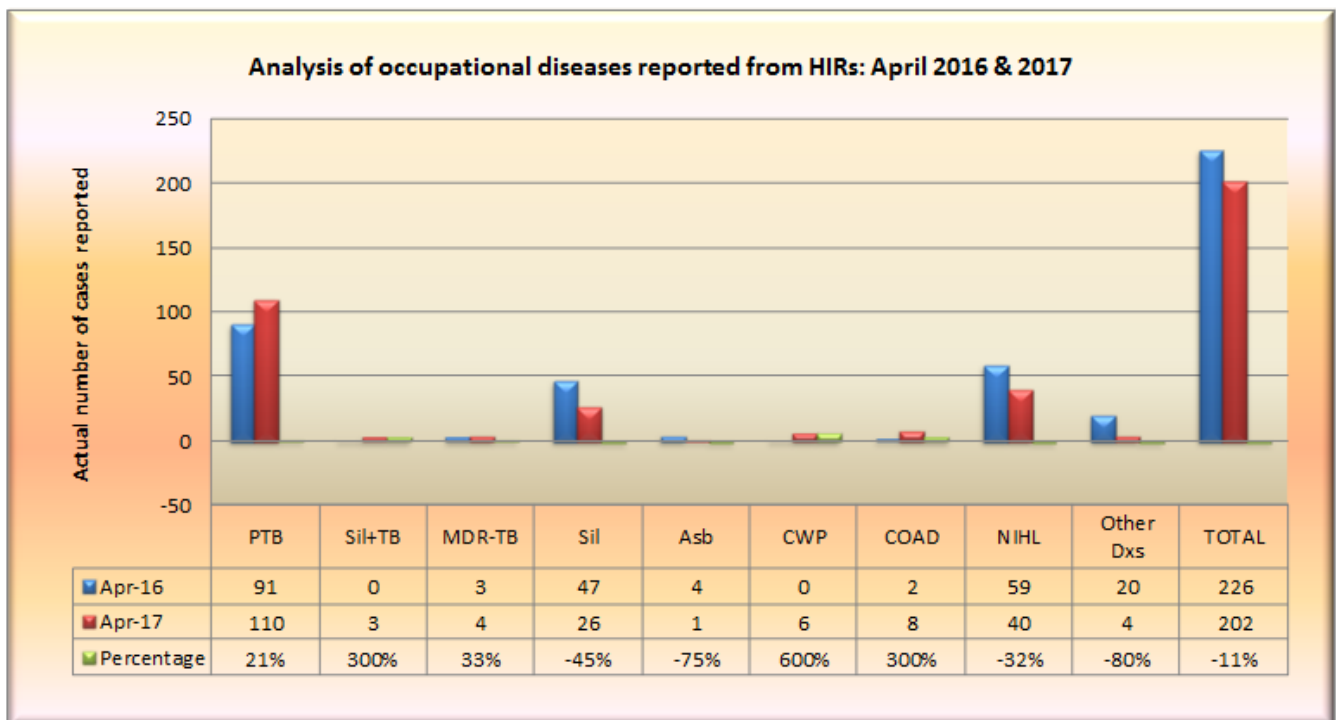
April 2017

Table 7.2.1 Occupational diseases/illness reported on Health Incident Reports (HIRs) per region:
April 2016 and April 2017

	EC		FS		GR		KZN		LP		Mpu		NC		NW K		NWR		WC		TOTAL		TOTAL
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	
PTB	0	0	19	23	12	35	4	3	0	0	7	18	5	6	0	0	37	25	7	0	91	110	21
Sil+TB	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	300
MDR-TB	0	0	1	1	0	0	0	0	0	0	0	3	0	0	0	0	1	0	1	0	3	4	33
XDR-TB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sil	0	0	27	20	4	0	0	0	0	0	3	1	0	0	0	3	13	2	0	0	47	26	-45
Asb	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	1	0	4	1	-75
CWP	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	6	600	
COAD	0	0	2	4	0	1	0	0	0	0	2	0	1	0	0	0	0	0	0	0	2	8	300
Occ Asthma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat Illness/Stroke	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NIHL	0	0	2	2	5	3	0	1	0	2	15	9	8	7	6	1	15	15	8	0	59	40	-32
Occ Skin Dxs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Muskulo-skeletal Disorders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Dxs	0	0	0	0	12	1	0	0	0	0	0	0	0	0	8	3	0	0	0	0	20	4	-80
Total	0	0	51	52	33	41	4	4	0	3	26	38	15	15	14	7	66	42	17	0	226	202	-11

Verification source: Health Incident Reports submitted by regions: April 2016 & 2017

Graph 7.2.1 Analysis of occupational diseases/illness reported from Health Incident Reports (HIRs):
April 2016 and 2017

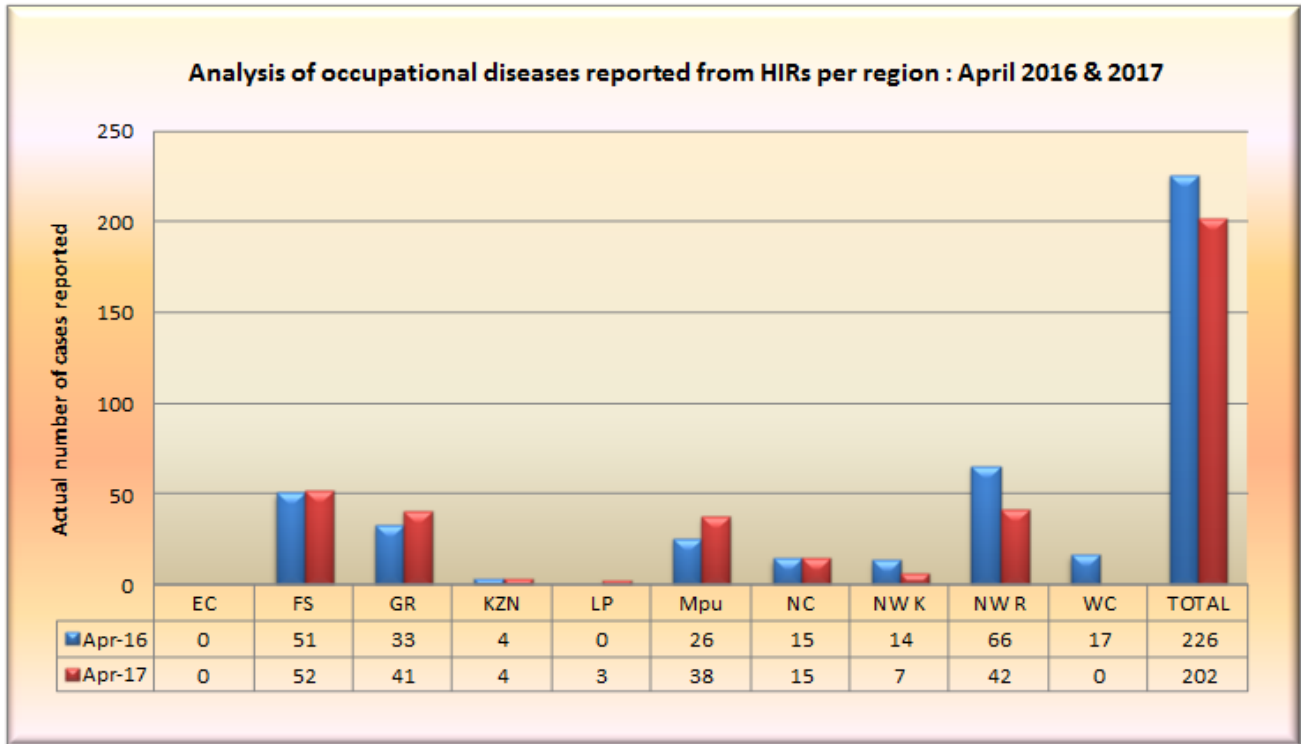


Verification source: Health Incident Reports submitted by regions: April 2016 and 2017



Occupational Health and Safety Report: April 2017

*Graph 2.2 Analysis of occupational diseases/illness reported from Health Incident Reports (HIRs) per region:
 April 2016 and 2017*



8. STATUS REPORT ON THE MINE HEALTH AND SAFETY COUNCIL (MHSC) AWARD SCHEME 2017

Table 8.1 Mines that have achieved the safety awards:

No	Mine	Award	Date recorded	Last fatality
1	Impala Platinum 14 Shaft	Million (1)	24/02/2017	23/01/2016
2	Mototolo Platinum: Lebowa	Thousand (9)	08/03/2017	Never
3	Thornccliffe Mine	Thousand (10)	14/03/2017	28/11/2007
4	Tselentis Colliery	Thousand (16)	12/04/2017	05/09/1991
5	Dorstfontein Colliery West	Thousand (4)	21/04/2017	15/03/2012