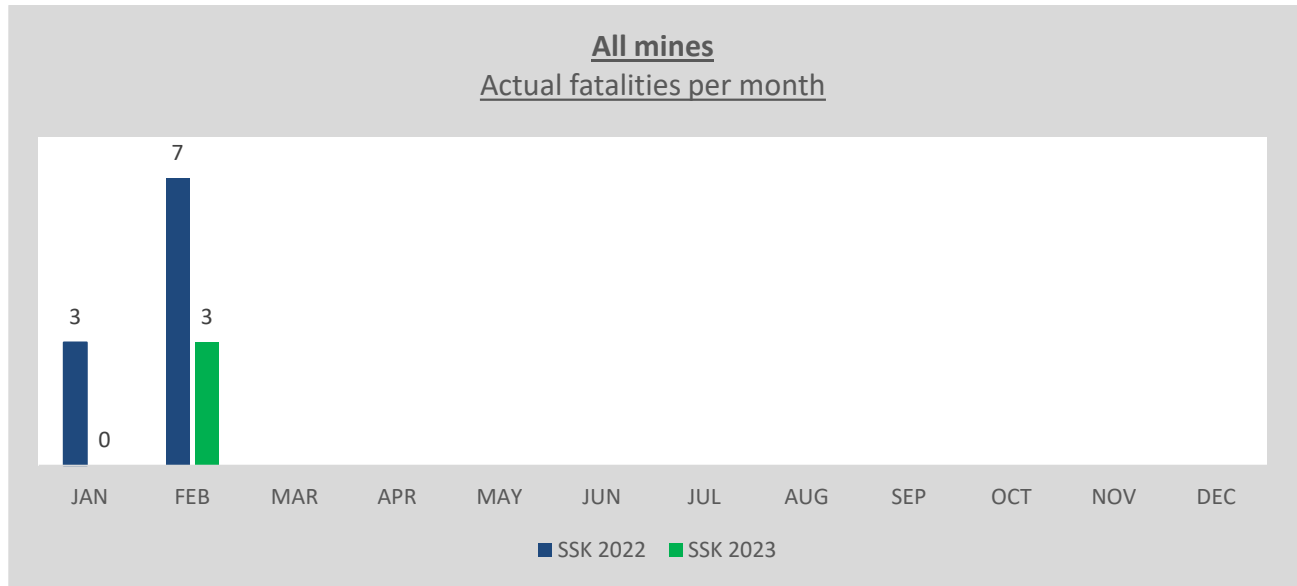




1. OVERALL FATALITIES PER MONTH

During the month of February 2023, **three (3)** fatalities were reported whilst during the same period in 2022 **four (4)** mine workers were fatally injured. Fatalities reported for the year up to February 2023 were **three (3)** while **seven (7)** were reported over the same period in 2022. This translates to an improvement in the number of fatalities of 57% year on year.



2. STATISTICS OF FATALITIES BY REGION

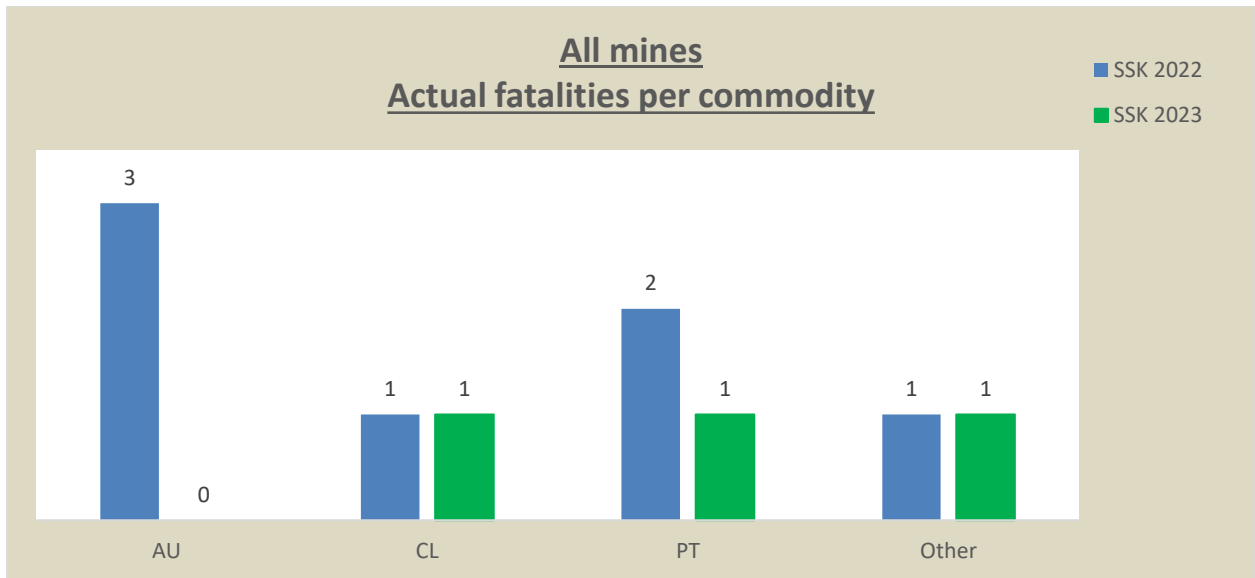
The table below illustrates the progressive performance of each region with regard to fatalities. During the month of February 2023, **seven (7)** of the **ten (10)** regions had not reported any fatalities.

	WC	NC	FS	EC	KZN	MP	LP	GP	NW-KLD	NW-RST	TOTAL
JAN	0	0	0	0	0	0	0	0	0	0	0
FEB	0	1	0	0	0	1	0	0	0	1	3
TOTAL	0	1	0	0	0	1	0	0	0	1	3

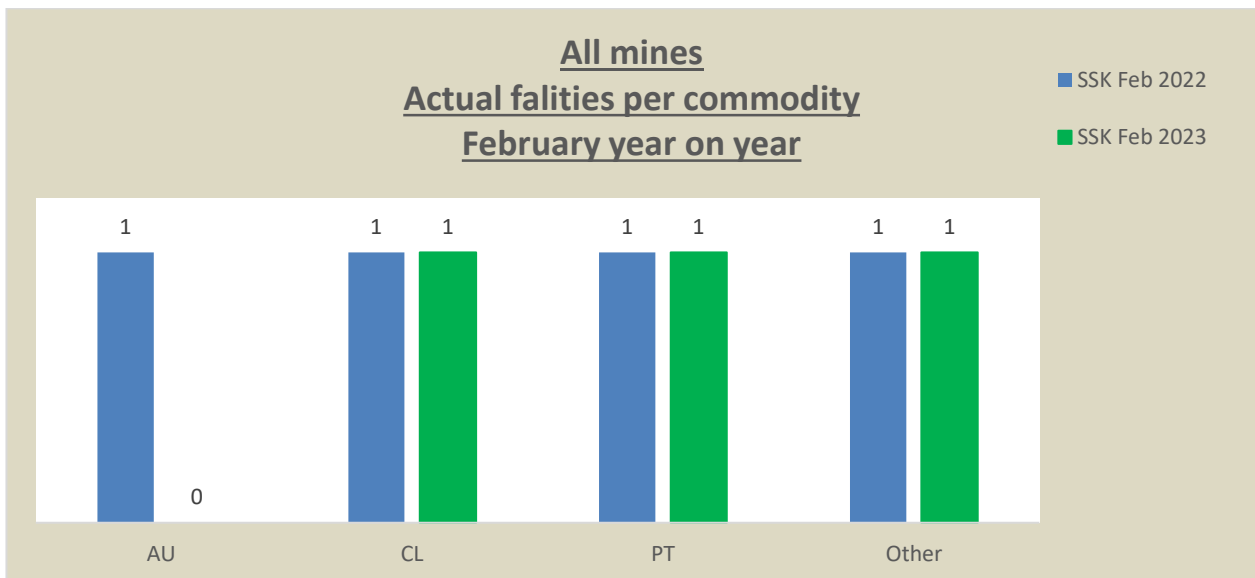
3. ANALYSIS OF FATALITIES BY COMMODITY

For the purpose of the analysis, commodities are grouped into gold (AU), platinum (PT), coal (CL) and other mines (Iron ore).

- 3.1** The comparison of fatalities for the year up to February 2023 and 2022 is reflected on the graph below and shows decreases in fatalities of 300% and 50% in the gold and platinum sectors respectively while the coal and other mines sectors show no change, with one (1) fatality reported each for 2022 and 2023 for the year up to February.



3.2 In February 2023, the coal, platinum and other mines sectors had reported **one (1)** fatality each while the gold sector had reported **none (0)**.

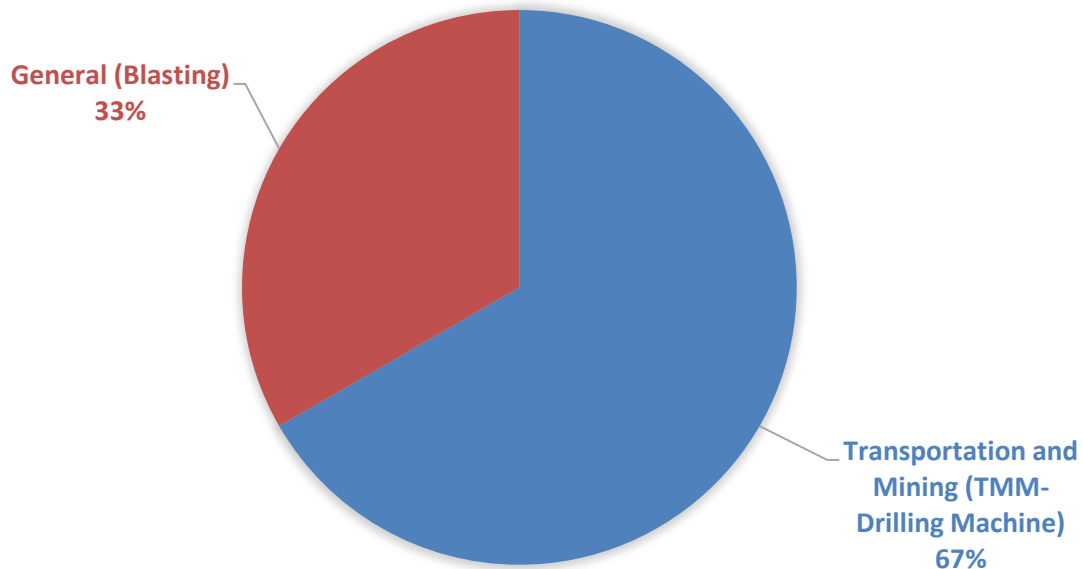


4. ANALYSIS OF FATALITIES BY CLASSIFICATION – ALL MINES

The graph below shows the causes of fatalities per classification for the year to February 2023.



All Mines
Fatalities per Classification
Jan-Feb 2023



4.1 Transportation and Mining (TMM-Drilling Machine) 67%

There were **two (2)** fatalities reported this year in February 2023 in this category. **One (1)** was reported at an iron ore mine and **one (1)** at a coal mine. In the first incident at an iron ore mine, the now deceased Assistant Driller was fatally injured when his head was caught between the gripper box and the rod handler. The now deceased was in the process of cleaning the drill hole with a shovel when he accidentally operated the rod handler. In the second incident at a coal mine, which was a subsequent fatality, the now deceased employee, who was injured on 12-December-2022, when he was struck by a pipe wrench spanner while he and other team members were extending a drill rod on a directional drill rig underground, passed away on 28-February-2023 whilst under specialist medical care in a private hospital.

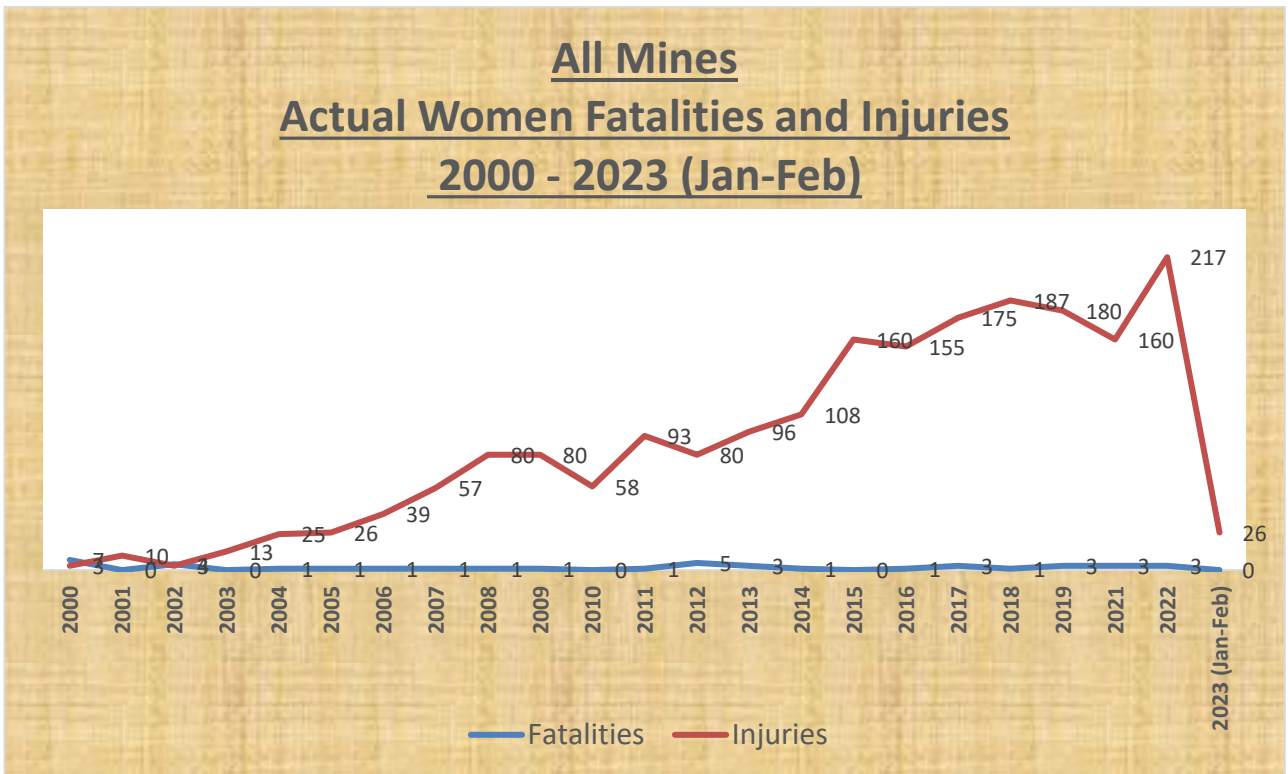
4.2 General (Blasting) 33%

There was **one (1)** fatality reported for this year in February 2023 in this category at a platinum mine. The now deceased Scraper Winch Operator was involved in a blasting accident on 16-January-2023 and passed away on 04-February-2023 in hospital, where he was taken to theatre as a planned procedure with the specialist team to further clean and deride his wounds as he had developed an Acinebacter infection. He had a cardiac arrest during the procedure and resuscitation was unsuccessful.

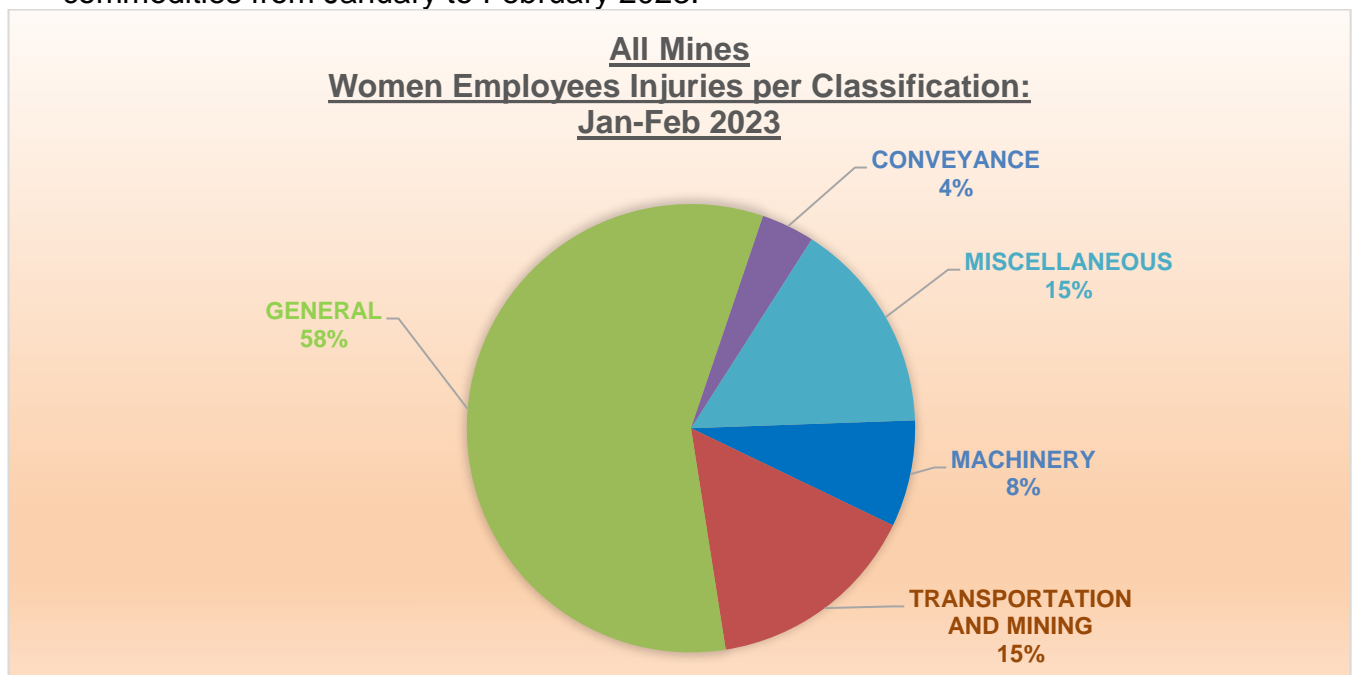


5. Women Employees

5.1 The number of women employees has steadily increased in the South African mining industry and the graph below shows injuries and fatalities to women employees across all commodities from 2000 to February 2023.

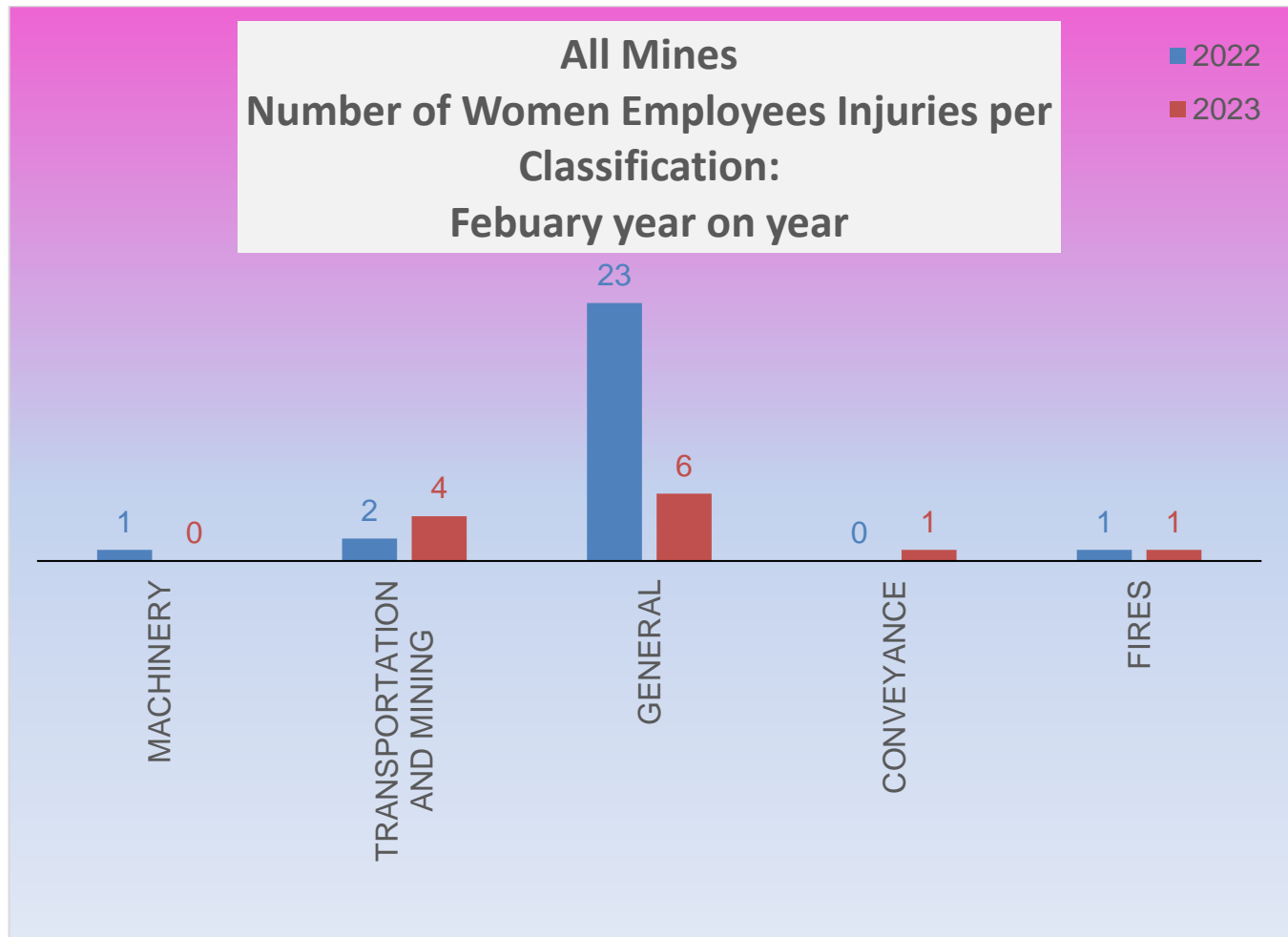


5.2 The graph below shows the classification of injuries to women employees across all commodities from January to February 2023:





5.3 The graph below shows the comparison of injuries to women employees across all commodities in February 2023 and February 2022:



6. FATALITIES AND INJURIES

6.1 FATALITIES

The table below reflects the number of fatalities that were reported for the months of January to February 2023 and 2022 per mine, per commodity.

	Jan-Feb 2022	Jan-Feb 2023
Gold Mines	3	0
Platinum Mines	2	1
Coal Mines	1	1
Other Mines	1	1
TOTAL	7	3



6.2 MINE INJURIES

The table below reflects the number of injuries that were reported for the year to February 2023 and 2022 per the classification of the accident.

	Injuries		
	Jan-Feb 2022	Jan-Feb 2023	% Change
FALL OF GROUND	38	22	-42
Rockburst	3	2	-33
Strainburst	1	3	200
Gravity	34	17	-50
MACHINERY	31	18	-42
Conveyor belts	7	5	-29
Drives, Belts and chains	4	3	-25
Portable power tools	13	8	-38
Other machinery (not included in TMM)	7	2	-71
RAILBOUND	14	17	21
Locomotive	2	5	150
Locomotive drawn vehicle	3	2	-33
Rerailing	2	1	-50
Coupling/uncoupling	4	4	0
Rocker arm shovel	0	1	100
Personnel transport	1	1	0
Hand trammed	1	2	100
Other Transport	1	1	0
WINCHES	15	9	-40
Scraper Winch Installation	11	8	-27
Single drum winch	2	0	-100
Double drum winch	1	0	-100
Mono rope/rail	1	1	0
TRACKLESS MOBILE MACHINES	11	20	82
Coal Mining Machines	0	1	100
Mechanical Loaders	1	4	300
Transporters	5	6	20
Motor vehicles	2	0	-200
T&M lifting machines	1	2	100
T&M mobile drilling machines	1	7	600
Other Transport	1	0	-100



	Jan-Feb 2022	Jan-Feb 2023	% Change
GENERAL	176	129	-27
Fall of material/rolling rock	26	22	-15
Manual handling of material	36	30	-17
Manual handling of mineral	5	4	-20
Falling in/from	4	7	75
Slipping and falling	67	43	-36
Burning and scalding	8	3	-63
Splinters	4	2	-50
Dust, gas and fumes	3	7	133
Inundation/Drowning	1	0	-100
Struck by ventilation door	1	0	-100
Struck by any object manual handling	21	11	-48
Conveyance accidents (shaft/winze)	3	4	33
Electricity (Not causing fires)	3	2	-33
Fires	4	0	-400
Miscellaneous	0	13	1300
TOTAL	295	234	-21

7. OCCUPATIONAL MEDICINE DMRE FY Q3 REPORT: FY 2022/23 (Apr-Dec 2022)

7.1 INTRODUCTION

In terms of section 11(5B) of the Mine Health and Safety Act (MHSA), Act No. 29 of 1996, as amended; the employer must notify the Principal Inspector of mines (PIoMs) of any occurrence at the mine that results in serious illness or death of any person. The employers submit to the PIoMs, the Health Incident Reports (HIRs) DMRE 231 Forms completed by the Occupational Medical Practitioners (OMPs) on monthly basis to report occupational diseases diagnosed amongst mine employees during medical surveillance.

7.2 OCCUPATIONAL DISEASES REPORTED

During April-December 2022/23, the mines reported a total of **1 185** occupational diseases from the Health Incident Reports (HIRs) submitted when compared to **1 023** cases reported during the same period in 2021/22. The Eastern Cape region did not report any occupational diseases for both reporting periods.

Calculation of the percentage change:

$$(1\ 185 - 1\ 023) / 1\ 023 * 100 = 15.84\%$$



7.3 ANALYSIS OF OCCUPATIONAL DISEASES REPORTED PER REGION

TABLE 7.3.1 Analysis of occupational diseases reported per region: April-December 2022/23 and April-December 2021/22

	EC		FS		GR		KZN		LP		Mpu		NC		NWK		NW R		WC		TOTAL		Percentage change
	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	
PTB	0	0	56	81	110	86	8	7	10	30	42	38	4	14	45	38	139	146	1	1	415	441	6.27
SII+TB	0	0	0	10	10	5	0	0	0	0	0	0	0	0	7	3	1	1	0	0	18	19	5.56
MDR-TB	0	0	2	3	3	0	0	0	0	1	2	1	0	1	1	0	2	8	0	0	10	14	40.00
XDR-TB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
Silicosis	0	0	64	94	41	31	1	0	1	1	0	5	0	0	43	27	7	13	0	0	157	171	8.92
Asbestosis	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0.00
CWP	0	0	1	3	0	0	0	0	1	0	5	4	0	0	0	0	0	0	0	0	7	7	0.00
COAD	0	0	18	29	5	5	0	0	0	0	6	2	0	0	7	5	6	17	0	0	42	58	38.10
Occ asthma	0	0	0	0	4	2	0	0	1	0	0	1	0	2	1	0	0	1	0	0	6	6	0.00
Occ lung cancer	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0.00
NIHL	0	0	35	36	100	132	2	1	15	15	23	19	5	8	45	19	104	193	14	5	343	428	24.78
Occ skin diseases	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	11	0	0	4	11	175.00
Platinum salt sensitivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
Musculoskeletal disorders	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	10	0	0	0	13	#DIV/0!
Progressive massive fibrosis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	#DIV/0!
Other occ diseases	0	0	0	2	0	2	0	0	1	4	2	0	1	1	0	0	15	5	0	0	19	14	-26.32
Total	0	0	176	258	275	264	11	8	30	51	80	72	10	28	149	92	277	406	15	6	1023	1185	15.84



7.4 ANALYSIS OF OCCUPATIONAL DISEASES REPORTED BY COMMODITY

- 7.4.1 The table below shows a comparison of occupational diseases reported per sector during April-December 2022/23 when compared to the same period in 2021/22. An increase has been noted on the overall total number of occupational diseases reported by the mines. Table 4.1 below shows a significant increase on the cases reported from the platinum sector.
- 7.4.2 The occupational lung diseases (OLD) and noise induced hearing loss (NIHL) cases have contributed to an increase on the cases reported during April-December 2022/23 when compared to the same period in 2021/22:
- 7.4.3 It must be noted that there is a considerable time lag between the employees' exposures to occupational/workplace hazards (e.g., respirable silica bearing dust and noise) and the manifestation of occupational diseases, particularly silicosis as shown on Figure 7.4.1 below, and the noise induced hearing loss (NIHL) cases as shown from Figure 7.7.1 to Figure 7.7.4 below.

Occupational Health and Safety Report: FEBRUARY 2023

Table 7.4.1 Analysis of occupational diseases reported by commodity: April-December 2022/23 and April-December 2021/22

	Gold		Platinum		Coal		Diamond		Copper		Chrome		Manganese		Iron ore		Other mines		TOTAL	
	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23	Q3 2021/22	Q3 2022/23
PTB	215	207	136	161	42	37	2	8	0	1	11	10	1	6	1	4	7	7	415	441
Sil+TB	17	18	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	19
MDR-TB	8	3	2	9	0	1	0	0	0	0	0	0	0	1	0	0	0	0	10	14
XDR-TB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silicosis	148	155	8	15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	157	171
Asbestosis	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
CWP	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	7	7
COAD	31	39	6	17	5	2	0	0	0	0	0	0	0	0	0	0	0	0	42	58
Occ asthma	2	2	0	1	0	1	3	0	0	0	1	0	0	0	0	2	0	0	6	6
Occ lung cancer	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NIHL	184	193	110	205	18	11	0	3	0	0	8	3	1	1	3	2	19	10	343	428
Occ skin diseases	1	0	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11
Platinum salt sensitivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Musculoskeletal disorders	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	13
Progressive massive fibrosis	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Other occ diseases	2	4	16	7	0	0	0	1	0	0	0	2	0	0	1	0	0	0	19	14
Total	609	622	282	439	73	60	5	12	0	1	21	15	2	8	5	10	26	18	1023	1185
Percentage change	2.13		55.67		-17.81		140.00		#DIV/0!		-28.57		300.00		100.00		-30.77		15.84	



7.5 ANALYSIS OF OCCUPATIONAL DISEASES BY DISEASE CLASSIFICATION GROUPS

7.5.1 OCCUPATIONAL LUNG DISEASES (OLD)

During April-December 2022, the mines reported a total of **719** occupational lung diseases (OLD) cases when compared to **657** cases during the same period in 2021/22. The OLD reported include the following: Pulmonary tuberculosis (PTB), Silico-tuberculosis (Sil+TB), Multidrug-resistant TB (MDR TB); Extremely-drug resistant TB (XDR-TB), Silicosis, Asbestosis, Coal workers' pneumoconiosis (CWP) Chronic obstructive airways disease (COAD), Occupational asthma, Occupational lung cancer and Progressive massive fibrosis (PMF).

7.5.1.1 SILICOSIS

The mines reported a total of **171** silicosis cases during April-December 2022/23 from **157** cases reported during the same period in 2021/22. The gold sector reported 155 cases, and the platinum sector reported **15** cases. The coal sector reported **seven** workers' pneumoconiosis (CWP) cases for both reporting periods.

7.5.1.2 PULMONARY TUBERCULOSIS (PTB)

During April-December 2022/23, the mines reported a total of **441** pulmonary tuberculosis (PTB) cases from **415** cases reported in the same period of 2021/22. The gold sector reported **207** PTB cases which is the highest total; followed by the platinum sector with **161** cases, and the coal sector with **37** cases. The mines also reported **14** multidrug-resistant TB (MDR-TB) cases from **10** cases reported in the same period of 2021/22. The platinum sector reported **nine** MDR-TB cases which is the highest, followed by the gold sector with **three** cases and the coal sector with **one** case.

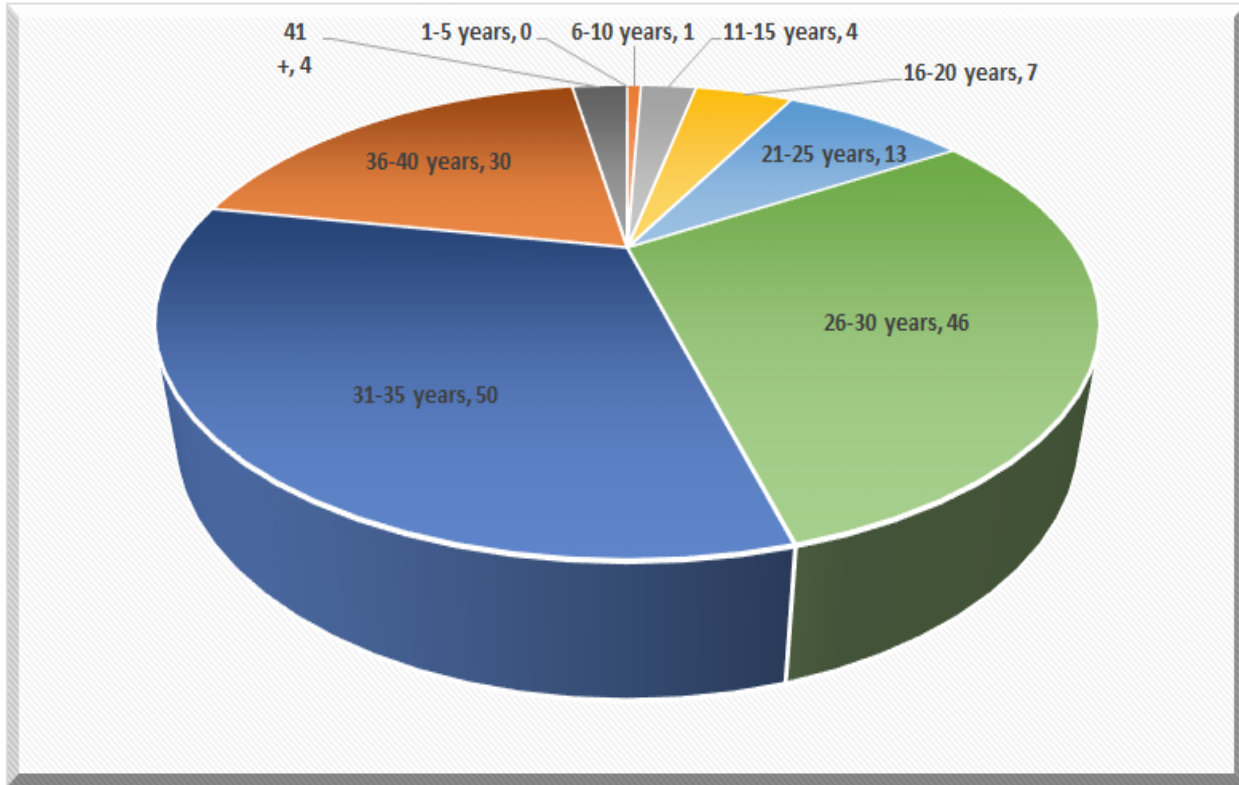
7.5.2 NOISE INDUCED HEARING LOSS (NIHL)

The mines reported a total of **428** noise-induced hearing loss (NIHL) cases during April-December 2022/23 from **343** cases reported during the same period in 2020/21. The platinum sector reported **205** cases which the highest total; followed by the gold sector with **193** cases; the coal sector with **11** cases and the chrome sector with **three** cases.



7.6 ANALYSIS OF SILICOSIS CASES REPORTED FROM GOLD MINES BY YEARS OF SERVICE

FIGURE 7.6.1 Analysis of silicosis cases reported from gold mines by years of service: April-December 2022/23



During April-December 2022/23, the gold sector reported **155** silicosis cases as shown on Figure 7.1 above. **One** accelerated silicosis case was reported within **≤6-10 years of service** in the mining industry. No female employees were reported with silicosis for both reporting periods.



7.7 ANALYSIS OF NOISE INDUCED HEARING LOSS CASES REPORTED BY COMMODITY, PERCENTAGE LOSS OF HEARING (PLH) AND YEARS OF SERVICE: APRIL-DECEMBER 2022/23

Table 7.7.1 Analysis of noise-induced hearing loss (NIHL) from gold mines: April-December 2022/23

	Years of service	Percentage loss of hearing (PLH)									Total	
		10-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	>50%		
Gold	1 - 5	0	0	0	0	0	0	0	0	0	0	0
	6 - 10	0	1	0	0	0	1	0	0	0	0	2
	11-15	9	4	1	2	0	0	0	1	0	17	
	16 - 20	18	2	4	0	0	1	0	0	0	25	
	21-25	9	4	1	0	0	0	0	0	1	15	
	26-30	20	3	2	1	0	1	0	0	1	28	
	31-35	37	7	4	2	2	0	0	0	2	54	
	36-40	23	10	3	0	1	2	2	0	1	42	
	41+	3	3	1	2	1	0	0	0	0	10	
	Total	119	34	16	7	4	5	2	1	5	193	

The gold sector reported a total of **193** noise induced hearing loss (NIHL) cases during April-December 2022/23 as shown on table 7.1 above. **One** case reported had a percentage loss of hearing (PLH) of **36-40**; the other **one** case had **16-20%**, and both cases had **≤10 years of service** in the mining industry.

Table 7.7.2 Analysis of noise-induced hearing loss (NIHL) from platinum mines: April-December 2022/23

	Years of service	Percentage loss of hearing (PLH)									Total	
		10-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	>50%		
Platinum	1 - 5	0	1	0	0	0	0	0	0	0	0	1
	6 - 10	2	1	1	0	0	0	0	0	0	0	4
	11-15	16	2	2	1	0	1	0	0	0	22	
	16 - 20	18	5	4	0	1	0	0	0	0	28	
	21-25	9	6	0	0	0	0	0	0	0	15	
	26-30	14	6	3	0	0	0	0	0	0	23	
	31-35	20	5	4	0	2	0	0	0	0	31	
	36-40	32	12	10	2	2	1	0	0	0	59	
	41+	7	4	7	1	2	0	1	0	0	22	
	Total	118	42	31	4	7	2	1	0	0	205	



Table 7.2 above shows a total of **205** noise induced hearing loss (NIHL) cases reported from the platinum sector during April-December 2022/23. **One** case reported had a percentage loss of hearing (PLH) of **16-20** with **≤1-5 years of service** in the mining industry. **Two** cases had **10-15%**; **one** case had **16-20%** and the other **one** case had **21-25%** with **≤10 years of service** in the mining industry.

Table 7.7.3 Analysis of noise-induced hearing loss (NIHL) from coal mines: April-December 2022/23

	Years of service	Percentage loss of hearing (PLH)									Total
		10-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	>50%	
Coal	1 - 5	0	0	0	1	0	0	0	0	0	1
	6 - 10	0	0	0	0	0	0	0	0	0	0
	11-15	0	1	0	1	0	0	0	0	0	2
	16 - 20	1	1	0	0	0	0	0	0	0	2
	21-25	1	1	0	0	0	0	0	0	0	2
	26-30	2	0	0	0	0	0	0	0	0	2
	31-35	0	0	0	0	0	0	0	0	0	0
	36-40	1	1	0	0	0	0	0	0	0	2
	41+	0	0	0	0	0	0	0	0	0	0
	Total	5	4	0	2	0	0	0	0	0	11

During April-December 2022/23, the coal sector reported a total of **11** cases as shown on table 7.3 above. **One** case reported had a percentage loss of hearing (PLH) of **26-30%** with **≤5 years of service** in the mining industry.

Table 7.7.4 Analysis of noise-induced hearing loss (NIHL) from chrome mines: April-December 2022/23

	Years of service	Percentage loss of hearing (PLH)									Total
		10-15%	16-20%	21-25%	26-30%	31-35%	36-40%	41-45%	46-50%	>50%	
Chrome	1 - 5	0	0	0	0	0	0	0	0	0	0
	6 - 10	0	0	0	0	0	0	0	0	0	0
	11-15	0	0	0	0	0	0	0	0	0	0
	16 - 20	0	0	0	0	0	0	1	0	0	1
	21-25	0	0	0	0	0	0	0	0	0	0
	26-30	0	0	0	0	0	1	0	0	0	1
	31-35	0	0	0	0	0	0	0	0	0	0
	36-40	1	0	0	0	0	0	0	0	0	1
	41+	0	0	0	0	0	0	0	0	0	0
	Total	1	0	0	0	0	1	1	0	0	3



The chrome mines reported **three** NIHL case as shown on table 7.7.4 above.

7.8 ANALYSIS OF DEATHS DUE TO WORK-RELATED DISEASES

No cases of deaths due to work-related diseases were reported for both reporting periods.

7.9 CONCLUSION

During April-December 2022/23, the total number of occupational diseases reported by mines from the Health Incident Reports (HIRs) have shown a slight increase when compared to the number of cases reported during the same period in April-December 2021/22.

7.10 RECOMMENDATIONS

The mines, particularly gold and platinum sectors put more effort in ensuring effective occupational risk exposures management, as they remain the key leading indicators towards driving change in preventing and reducing the incidence of occupational diseases. Critical controls strategies like **MOSH** dust leading practices and Industry-wide Buy and Maintain Quiet Initiative (**IBMQI**) exit for adoption and implementation by the mines.



8. STATUS REPORT ON THE MINE HEALTH AND SAFETY COUNCIL (MHSC) AWARD SCHEME 2023

Table 8.1 Mines that have achieved the safety awards:

NO	MINE	AWARD	DATE RECORDED	DATE OF LAST FATALITY (prior to this achievement)
1	Forzando Colliery South Mine	Thousand (18)	23/01/2023	Never
2	Middelburg Townlands Colliery	Thousand (16)	29/01/2023	Never
3	Venetia Diamond Mine	Million (8)	31/01/2023	25/03/2018
4	Dorstfontein Colliery East Mine	Thousand (12)	18/02/2023	Never
5	Assmang Manganese (Black Rock)	Million (11)	23/02/2023	23/04/2009
6	Driefontein Gold Mine	Million (2)	27/02/2023	19/01/2022