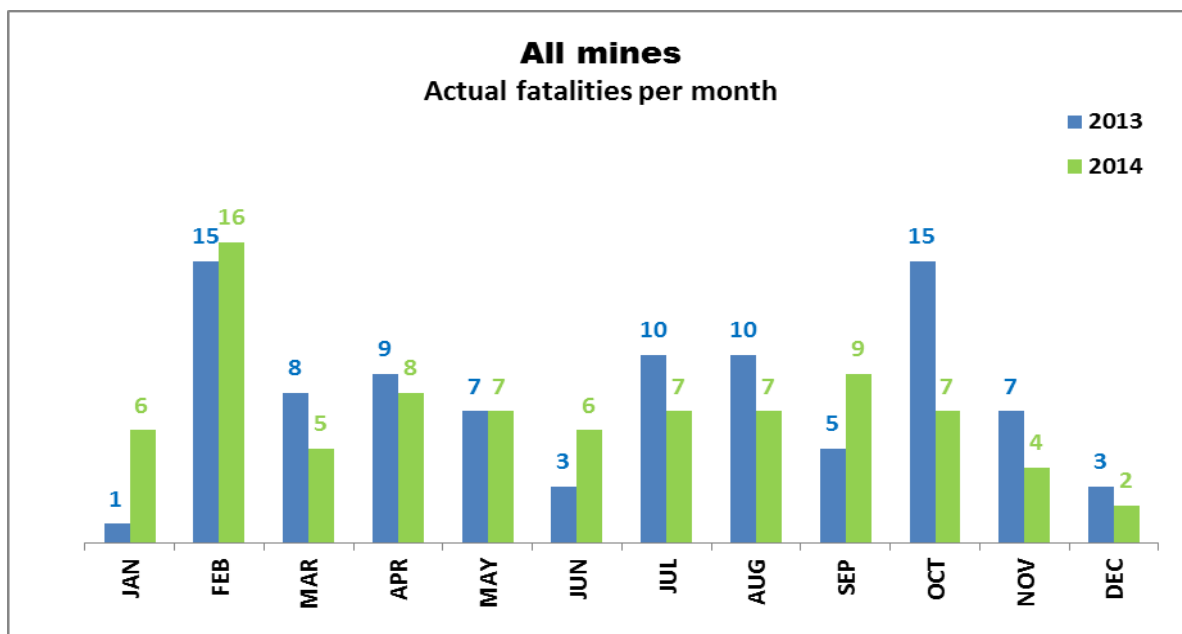




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1. OVERALL FATALITIES PER MONTH

During the month of December 2014, **two (2)** fatalities were reported. However, from January to December 2014 a total of **eighty four (84)** mine workers were fatally injured whilst during the same period in 2013 a total of **ninety three (93)** mine workers were fatally injured. This translates into 10% decrease, 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 December 2014, **eight (8)** of the **ten (10)** regions managed to mine without a fatality. The Western Cape (WC) and Eastern Cape (EC) regions have not reported any fatality in 2014. These two regions have been fatality-free since 1 May 2009 and 7 February 2013 respectively.

| | WC | NC | FS | EC | KZN | MPU | LP | GP | NW-KD | NW-RB | TOT |
|--------------|----------|----------|-----------|----------|----------|----------|----------|-----------|----------|-----------|-----------|
| Jan | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 6 |
| Feb | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | 1 | 0 | 16 |
| Mar | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 5 |
| Apr | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 8 |
| May | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 7 |
| June | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 6 |
| July | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 7 |
| Aug | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 3 | 7 |
| Sep | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 4 | 9 |
| Oct | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 6 |
| Nov | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |
| Dec | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| Total | 0 | 1 | 11 | 0 | 3 | 9 | 7 | 29 | 3 | 21 | 84 |



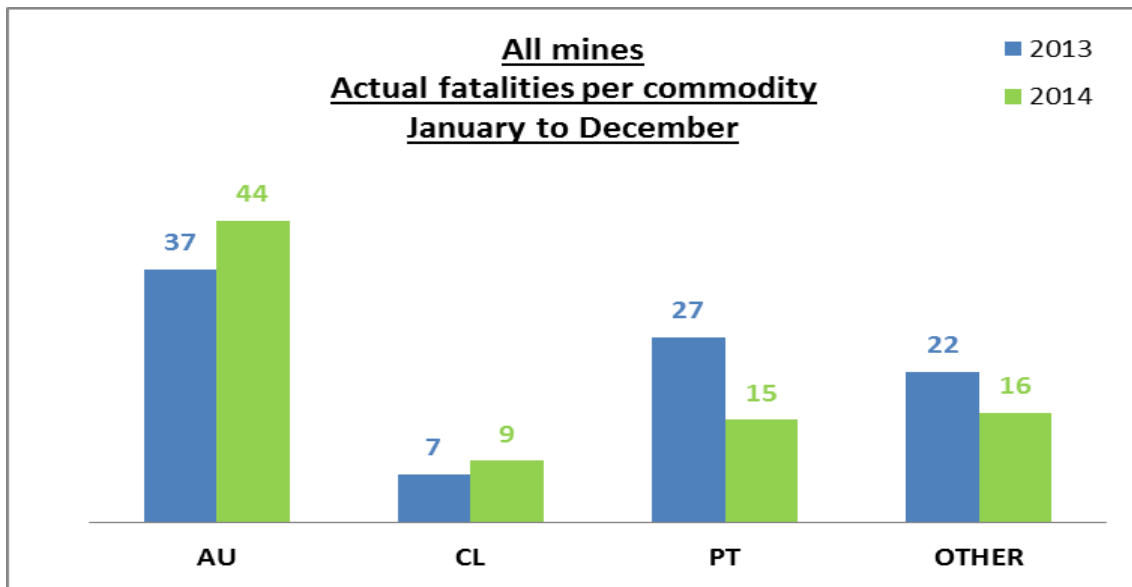
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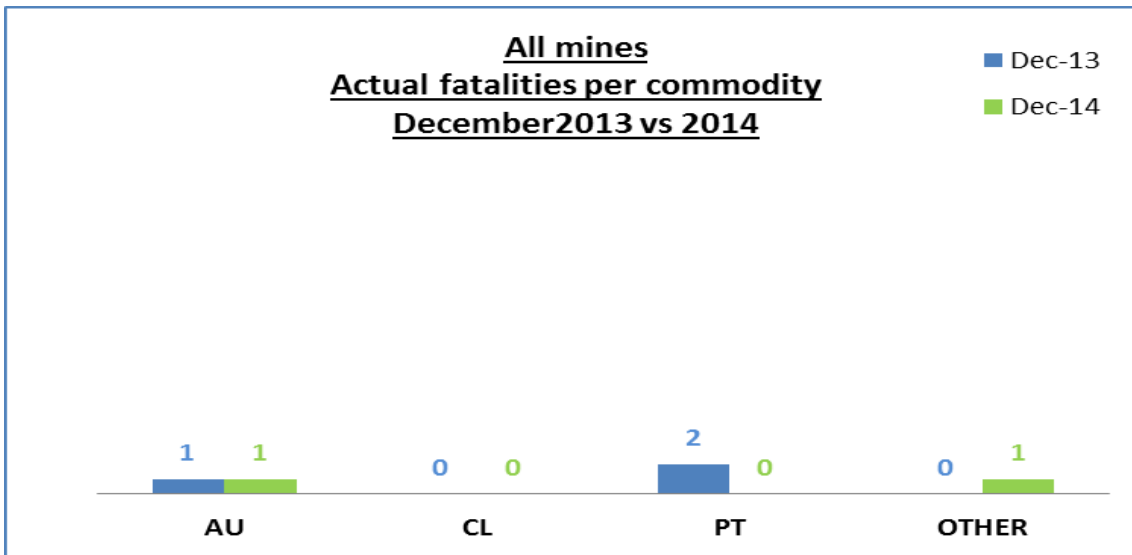
3. ANALYSIS OF FATALITIES BY COMMODITY

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 on year to date as reflected on the graph below shows an increase in fatalities in the gold and coal sectors of 19% and 29% respectively, while the platinum and other mines sectors show a reduction in fatalities of 44% and 27% respectively.

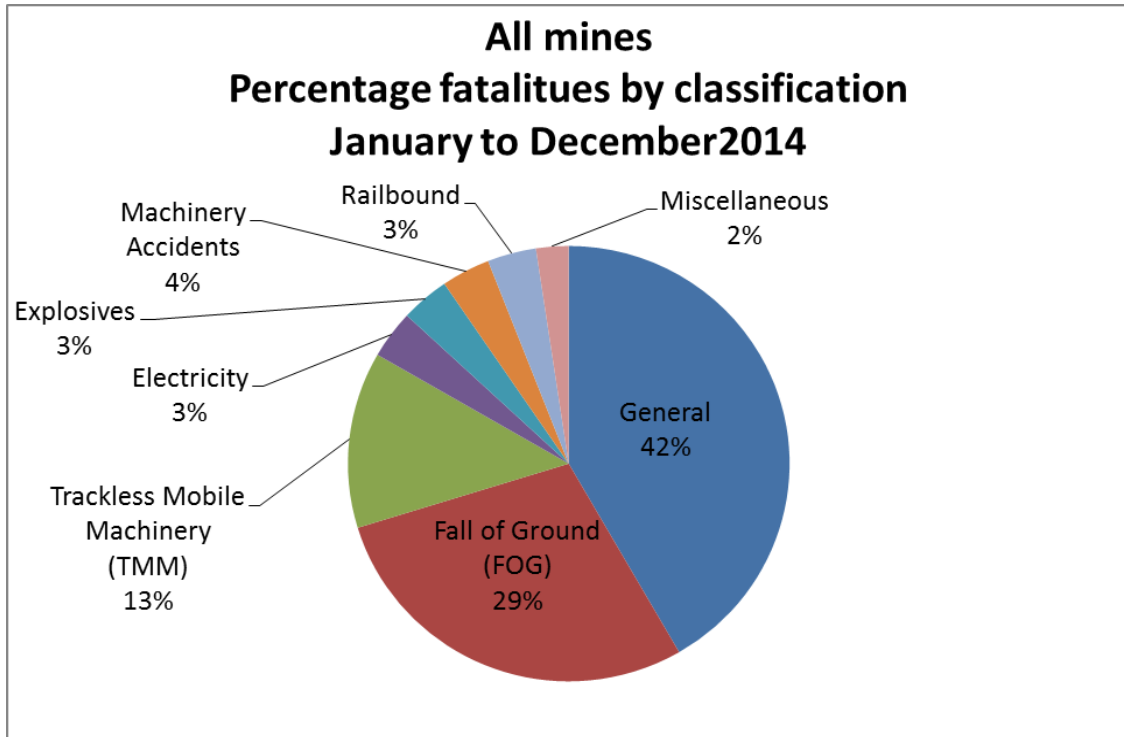


3.2 In December 2014, the gold and other mines sectors reported **one (1)** fatality each, while the platinum and coal mines reported **none (0)**. During the same period in 2013 the gold and platinum sectors had reported **one (1)** and **two (2)** fatalities respectively.





4. ANALYSIS OF FATALITIES BY CLASSIFICATION



4.1 General (42%)

There were **thirty five (35)** fatalities reported in this category this year and **one (1)** during December 2014, in which an employee lost his life when a pressurised cylinder ruptured, while in the process of repairing the AA sampling machine at a gold mine plant.

4.2 Fall of Ground/Rockfall (29%)

There were **twenty four (24)** fatalities reported in this category this year, **sixteen (16)** in the gold mines sector, **three (3)** in the other mines sector, **two (1)** in the coal mines sector and **four (4)** in the platinum mines sector. No fatalities were reported in December 2014. Of the 24 fall of ground accidents that occurred in 2014, **sixteen (16)** were gravity related and **eight (8)** were seismic related.

4.3 Trackless Mobile Machines (TMM) (13%)

There were **eleven (11)** fatalities reported in this category this year and one fatality was reported in December 2014, where a Miner was driven over by an LHD while sitting in the cubby, apparently due to obscured vision of the LHD driver and the fan noise in the cubby.



4.4 Electricity (4%)

There were **three (3)** fatalities reported in this category this year and no fatalities were reported in December 2014.

4.5 Explosives (4%)

There were **three (3)** fatalities reported in this category this year and no fatalities were reported in December 2014.

4.6 Machinery Accidents (4%)

There were **three (3)** fatalities reported in this category this year and no fatalities were reported in December 2014.

4.7 Railbound (4%)

There were **three (3)** fatalities reported in this category this year and no fatalities were reported in December 2014.

4.8 Miscellaneous (2%)

There were **two (2)** fatalities reported in this category this year and no fatalities were reported in December 2014.

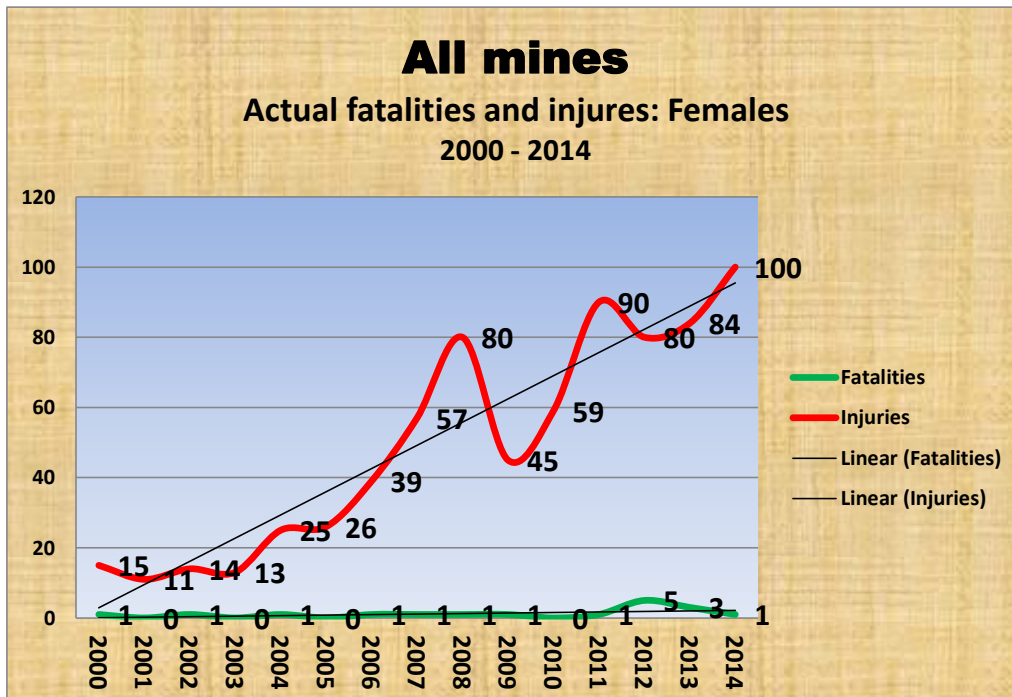
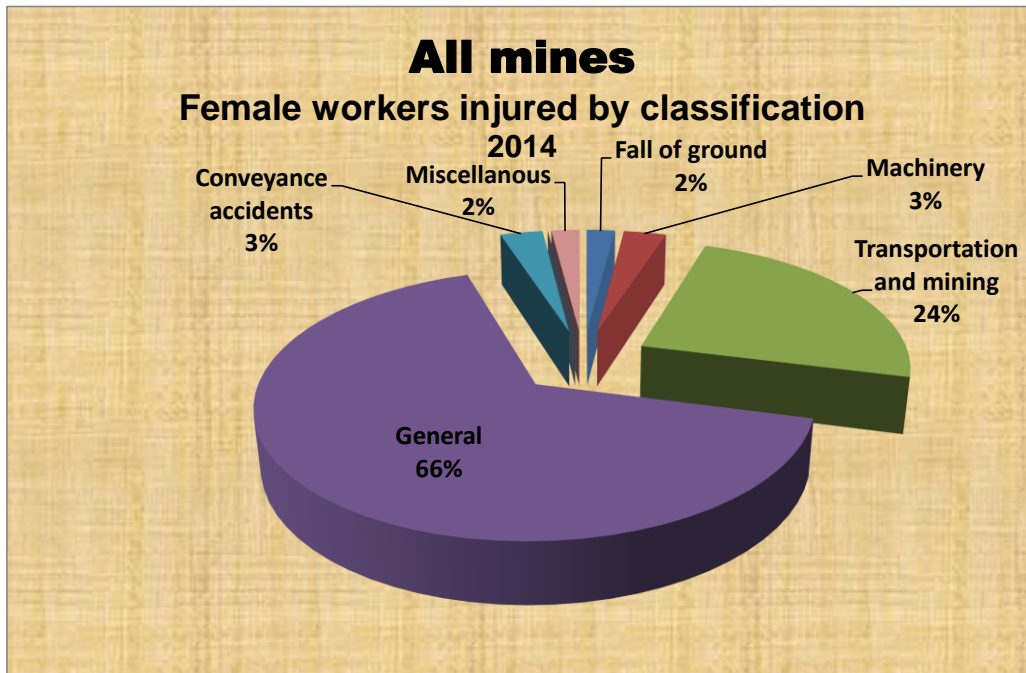
4.9 Female Workers

The number of female workers has steadily increased in the South African mining industry and the graph below shows a classification of injuries to females across all commodities for the years 2000 – 2014.



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5. FATALITIES AND INJURIES.

5.1 FATALITIES

| | Jan-Dec 2013 | Jan-Dec 2014 |
|-----------------------|--------------|--------------|
| Gold Mines | 37 | 44 |
| Platinum Mines | 27 | 16 |
| Coal Mines | 7 | 9 |
| Other mines | 22 | 15 |
| GRAND TOTAL | 93 | 84 |

5.2 MINE INJURIES

The table below reflects the number of injury accidents that were reported from 1 January to 31 December 2014, per the classification of the accident.

| | Injuries | | |
|----------------------------------|---------------------|---------------------|----------|
| | 1 Jan - 31 Dec 2013 | 1 Jan - 31 Dec 2014 | % Change |
| FALL OF GROUND | 536 | 399 | -26 |
| Rockburst | 100 | 63 | -37 |
| Strainburst | 52 | 50 | -4 |
| Gravity | 384 | 286 | -26 |
| MACHINERY | 217 | 203 | -6 |
| Conveyor belts | 41 | 53 | 29 |
| Drives, belts, chains | 21 | 22 | 5 |
| Portable power tools | 124 | 91 | -27 |
| Other | 31 | 37 | 19 |
| TRANSPORTATION AND MINING | 567 | 435 | -23 |
| Locomotive | 38 | 37 | -3 |
| Locomotive drawn vehicle | 58 | 40 | -31 |
| Rerailing | 22 | 13 | -41 |
| Coupling/uncoupling | 51 | 41 | -20 |
| Scraper winch installation | 104 | 63 | -39 |
| Other (transport) | 8 | 11 | 38 |
| Endless rope vehicle | 1 | 3 | 100 |
| Single drum winch | 23 | 11 | -52 |
| Double drum winch | 15 | 7 | -53 |
| Rocker arm shovel | 18 | 10 | -44 |
| Personal transport | 12 | 8 | -33 |
| Mono rope/rail | 7 | 7 | 0 |



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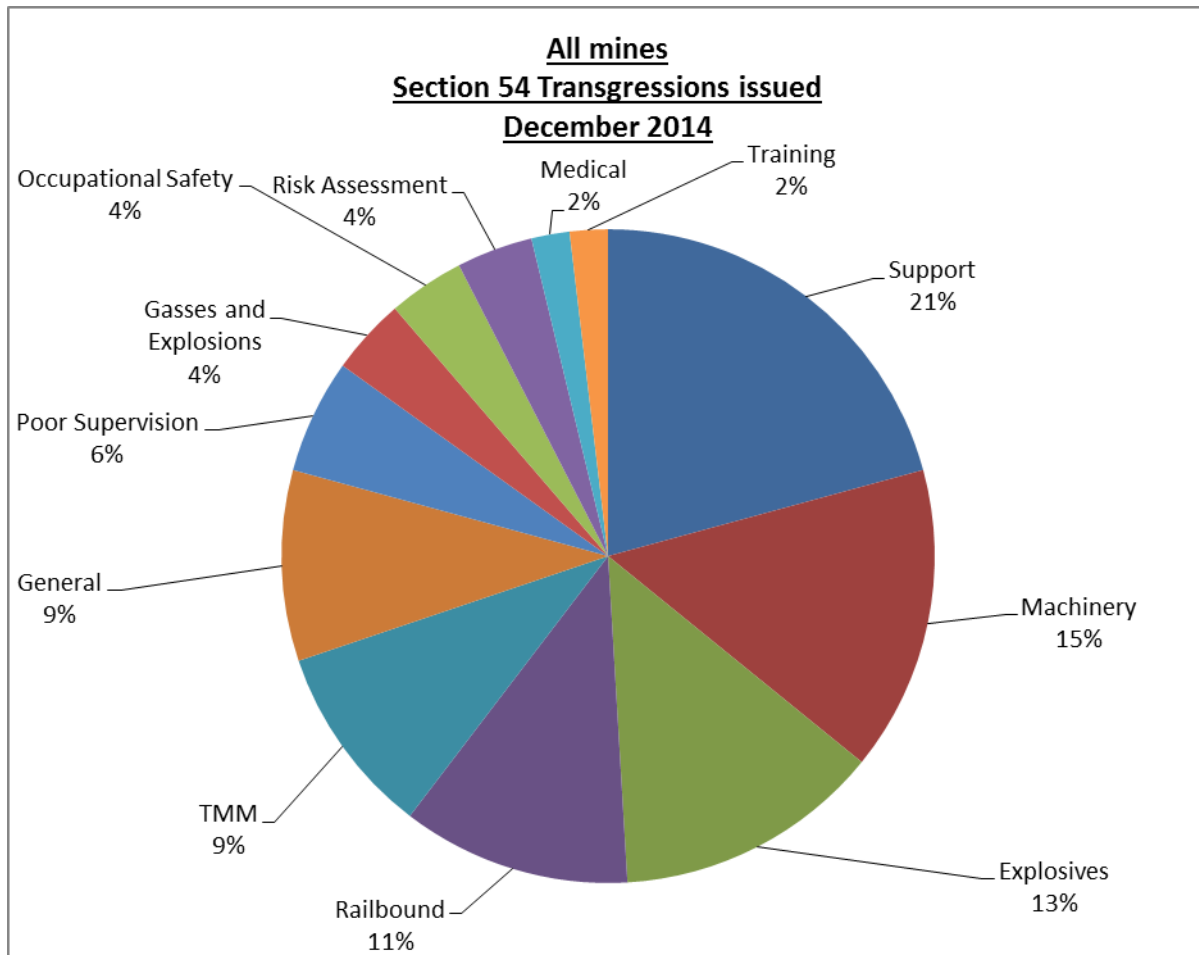
| | Injuries | | |
|--|---------------------|---------------------|------------|
| | 1 Jan - 31 Dec 2013 | 1 Jan - 31 Dec 2014 | % Change |
| Hand trammed | 16 | 7 | -56 |
| Mechanical loaders | 19 | 23 | 21 |
| Tractor/trailer | 9 | 12 | 33 |
| Coal mining machines | 4 | 1 | -75 |
| Transporters | 52 | 48 | -8 |
| Motor vehicles | 29 | 15 | -48 |
| T&M lifting machines | 34 | 40 | 18 |
| T&M mobile drilling machines | 36 | 31 | -14 |
| Other TMM | 11 | 7 | -36 |
| GENERAL | 1638 | 1326 | -19 |
| Fall of material/rolling rock | 364 | 230 | -37 |
| Manual handling of material | 436 | 322 | -26 |
| Manual handling of mineral | 56 | 51 | -9 |
| Falling in/from | 44 | 45 | 2 |
| Slipping and falling | 413 | 351 | -15 |
| Burning and scalding | 35 | 36 | 3 |
| Splinters | 23 | 31 | 35 |
| Dust,gas and fumes | 88 | 65 | -26 |
| Inundation/drowning | 2 | 5 | 150 |
| Struck by ventilation door | 23 | 22 | -4 |
| Struck by any object manual handling | 154 | 168 | 9 |
| Conveyance accidents (s/w) | 30 | 28 | -7 |
| Electricity (Not causing fires) | 27 | 32 | 19 |
| Fires | 9 | 4 | -56 |
| Explosives | 9 | 28 | 211 |
| Subsidence/caving | | | |
| Heat sickness | 4 | 10 | 150 |
| Miscellaneous | 80 | 102 | 28 |
| Total | 3117 | 2567 | -18 |



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6. SECTION 54 TRANSGRESSIONS REPORTED DURING THE MONTH

The graph below shows the percentages of transgressions listed on the Section 54 instructions issued during the month of December 2014.



6.1 Support (21%)

This category of transgressions accounted for most of the section 54 instructions issued in December 2014 and the areas covered were:

- cubbies along the travelling way were not supported;
- temporary support was measured to be 1.4m from the face and 1.6m apart instead of 0.5m and 1.5m respectively;
- support in the refuge bay was found to be sub-standard;
- support was measured to be 3.2m against a mine standard of 2.2m;
- protruding roofbolts were not replaced in the centre gully;
- hydro-bolts were missing at the intersection of the centre gully and the ASG (Advance Strike Gulley);
- damaged hydro-bolts were not replaced;
- damaged elongates were observed at the ASG;
- support was measured 2.9m and 3.0m against a standard of 2.0m from the face;



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- pack to face was measured to be 5.1m against a mine standard of 4.5m; and
- the siding was not supported.

6.2 Machinery (15%)

The areas covered in this category of transgressions were:

- moving parts were not guarded at the sorting plant;
- rigging of winches was suspended until after the accident scene was visited;
- mono-winchs were not locked at two separate cross-cuts;
- sub-standard winches, where there were no signalling bell wires, not locked out and one sling used at the return;
- sub-standard mono-winchs, where there were no trip wires installed and there were no signalling bell wires,
- there were no tail pulley guards on the conveyor belts; and
- poor maintenance of signalling systems was observed.

6.3 Explosives (13%)

The areas covered in this category of transgressions were:

- fuses were found at the top of the panel in an unlocked elephant foot bag, unattended;
- the explosives box was found not locked in the crosscut;
- discrepancies were found in the Miner's explosives control book;
- the explosives box in the cross cut was not locked;
- the explosives box in the haulage was not locked;
- the explosives box was measured to be 0.74m from the rail, against a mine standard of 0.8m; and
- the Miner was storing 200kg of explosives in a drum against a standard of 150kg.

6.4 Railbound (11%)

The areas covered in this category of transgressions were:

- slipper spacing was found to be 0.8m and 1.0m against a mine standard of 0.75m;
- four bolts were missing on the switch fish-plate;
- worn rail clippers were observed for the whole length of a 9m long rail;
- slipper spacing was measured to be 1.1m, 0.9m and 0.89m against a mine standard of 0.75m;
- a rail was found broken and the broken piece was not fastened with fish plate bolts; and
- a hopper pulled by a loco had derailed where the rail gauge was measured to be 940mm against a mine standard of 914.

6.5 TMM (Trackless Mobile Machines) (9%)

The areas covered in this category of transgressions were:



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- an employee sustained a broken left leg when an ore transporting tractor reversed and struck him;
- inadequate guarding was observed around the LHD (Load Haul Dumper)'s operator cabin area;
- an Avant loader was found operating with park brake, hand brake and lights not working;
- there were no pre-use checklists available for TMMs; and
- TMM operators had no understanding of using the PDS (Proximity Detection System) checklists and the system was not functioning;

6.6 General (9%)

The areas covered in this category of transgressions were:

- poor barring was observed on the decline sidewalls;
- the mine was pulling ore on Sundays and the Sunday Labour permission dated 25/03/2014 did not allow for it;
- scene of accident that occurred two days ago was not restored, still posing danger;
- re-entry procedure was not followed; and
- poor barring was observed in the gully.

6.7 Poor Supervision (6%)

The areas covered in this category of transgressions were:

- the Miner did not know the blasting box conditions;
- over-inspection of daily inspections was not conducted; and
- most of the employees were not complying to the PPE warning signs.

6.8 Gasses and Explosions (4%)

The areas covered in this category of transgressions were:

- GDIs' (Gas Detecting Instruments') alarm levels were not adhered to; and
- faulty GDIs were found and the risk assessment conducted was poor.

6.9 Occupational Safety (4%)

The areas covered in this category of transgressions were:

- employees were observed working at height without safety harness; and
- four employees were working in the plant with worn out safety shoes.

6.10 Risk Assessment (3%)

The areas covered in this category of transgressions were:

- no PTOs (Planned Task Observations) were conducted on the injured; and
- there were no lock-out, HIRA and pipe extension procedures in place.



6.11 Medical (2%)

The area covered in this category of transgressions was that employees were working without valid medical certificates.

6.12 Training (2%)

The area covered in this category of transgressions was that employees were not trained on pipe extension and lock-out procedures.

7. OCCUPATIONAL MEDICINE AT MINES

7.1 OVERVIEW

There has been an improvement on the number of reporting mines for both occupational hygiene exposures and occupational diseases, though there is a difference in the actual number of mines that submitted Occupational Hygiene Statutory Returns and Annual Medical Reports (AMRs). The analysis of data is based on received occupational hygiene statutory returns and AMRs.

The accuracy of data used to compile the report remains a challenge for the sector since some of the mines did not submit their reports as per the requirement of the Mine Health and Safety Act, 1996.

The mining industry has to realize that the improvement of Occupational Health (OH) performance requires a more focused approach, a significant commitment and a multidisciplinary effort to address OH and working conditions.

The occupational hygiene stressors remain a challenge although an improvement has been recorded in terms of compliance from 2011 to 2012. The overexposures to occupational hygiene stressors in A and B classification bands remain a challenge.

In 2012 the number of initial medical surveillance examinations conducted decreased, whilst the figure of both periodic and exit medical examinations conducted increased compared to the previous year.

In the gold mines, the total amount of occupational diseases reported decreased. The quantity of reported pulmonary tuberculosis (PTB), Silico-tuberculosis (Sil+TB), Noise Induced Hearing Loss (NIHL) decreased whilst the number of silicosis and other diseases slightly increased.

In the platinum sector, the total number of occupational diseases reported decreased. However there was an increase of number of silicosis and other diseases reported. There was only one case of Silico-tuberculosis (Sil+TB) reported, Noise Induced Hearing Loss (NIHL) increased by



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one case and Coal Workers Pneumoconiosis (CWP) cases increased by four. The number of PTB cases slightly decreased and there was no Asbestosis case reported during the year under review.

In the coal mines, the total figure of occupational diseases reported decreased. However, the quantity of silicosis and other diseases reported increased. The figure of Noise Induced Hearing Loss (NIHL) cases appreciably decreased, whilst the number of pulmonary tuberculosis (PTB) and Coal Workers Pneumoconiosis (CWP) slightly decreased.

In diamond mines the total figure of occupational diseases reported showed an insignificant increase from 20 to 29 cases.

In other mines the total number of occupational diseases reported increased, however, silicosis cases reported decreased significantly. The quantity of pulmonary tuberculosis (PTB), Noise Induced Hearing Loss (NIHL), Coal Workers Pneumoconiosis (CWP), Asbestosis and other diseases reported showed a slight increase, whilst the number of Silico-tuberculosis (Sil+TB) cases reported decreased by one case.

During the period under review, most of the appeals received were lodged as a result of tuberculosis (TB), Injury complications, hearing loss, vision related problems and other diseases. Other diseases in this case are related but not limited to lung and heart diseases, diabetes and psychiatric illnesses. Some appeals were based on compensation complaints, which are not dealt with under the MHSA. In terms of appeal findings, 75% of appellants were found to be unfit to perform work in a mine, while 25% were found to be fit.

Improved compliance to the provisions of MHSA, especially in relation to accurate statutory reporting within the prescribed timeframes, adherence to the hierarchy of controls in the management of occupational hygiene stressors, management implementation of risk-based medical surveillance system, as well as linkage of occupational hygiene measurements to each employee's records of medical surveillance is essential to achieve the occupational health milestones set in 2003.

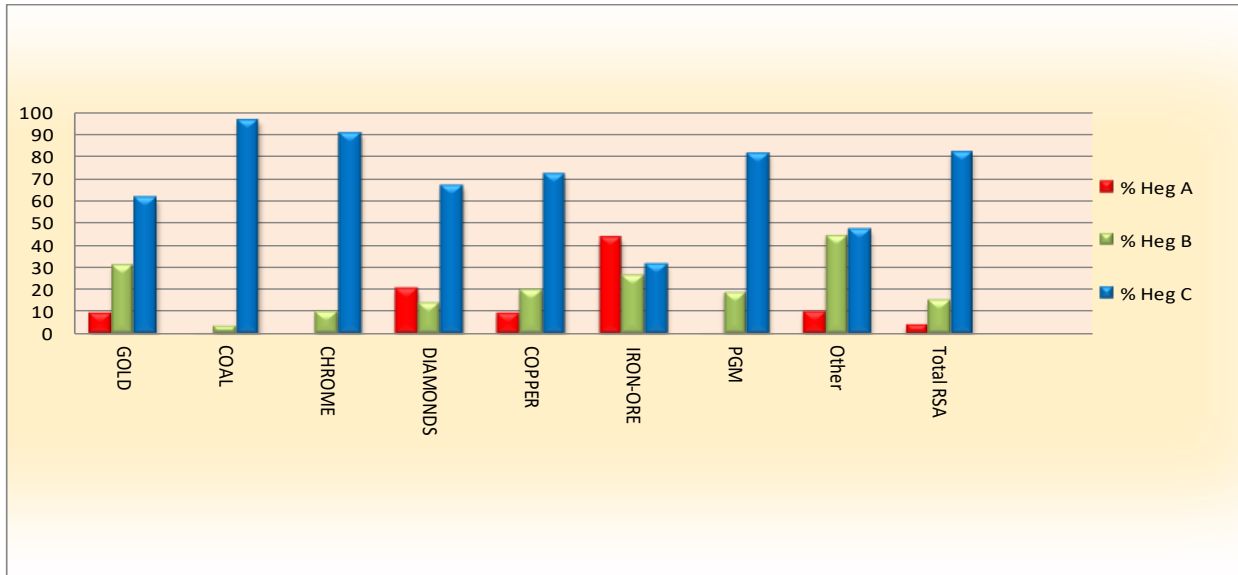


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Occupational Hygiene

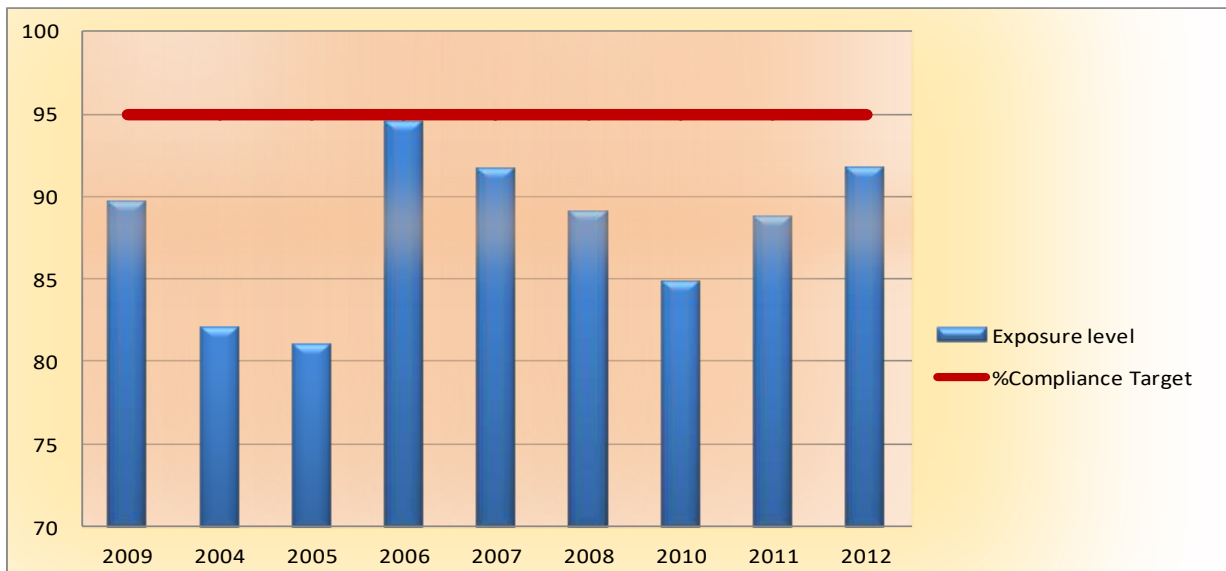
% Exposure to Airborne Pollutants per Classification Band per Commodity - 2012



Both per regional and per commodity over exposures to airborne pollutants for the year 2012 in the A and B classification bands are 6% and 27.4 % respectively, as compared to the previous year exposures of 5.8% and 21.6%.

More focus is still required on the controls, thus mines must still address the risks in these bands as recommended in the Chief Inspector of Mines Guideline for the compilation of a mandatory code of practice for an Occupational Health Programme on personal exposure to Airborne Pollutants, Reference Number 16/3/2/4-A1. A concerted multidisciplinary effort is required as well as sharing of best practices to control and reduce dust at source.

% Compliance to Respirable Crystalline Silica (<math><0.10\text{mg}/\text{m}^3</math>)



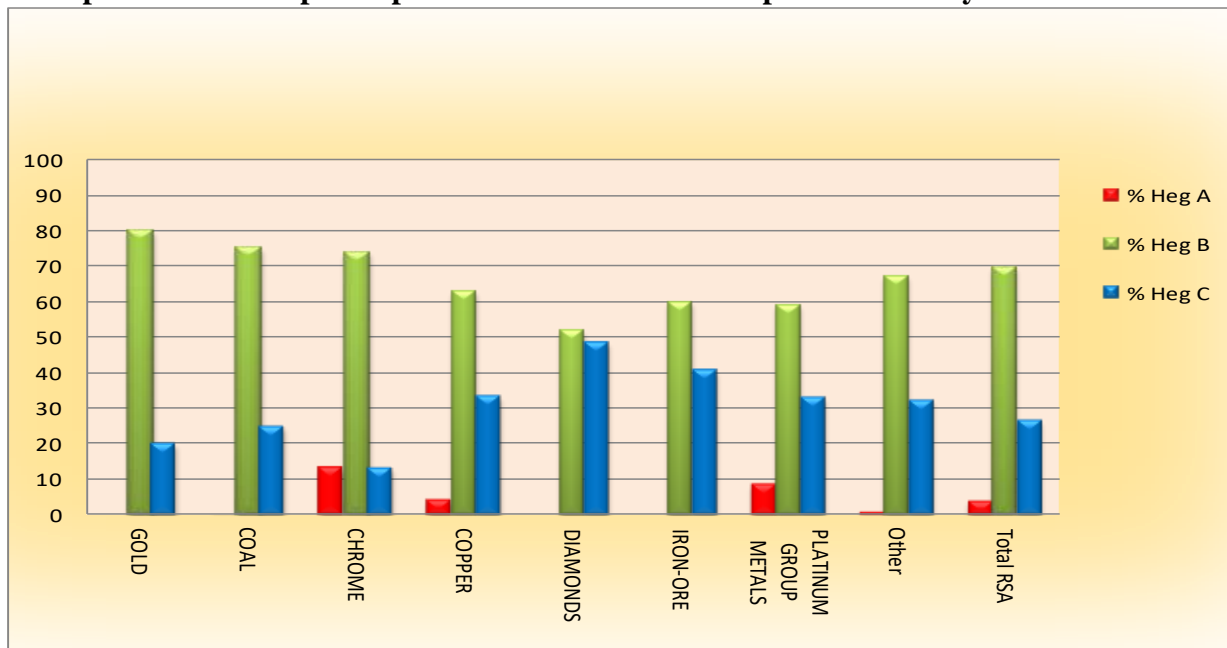


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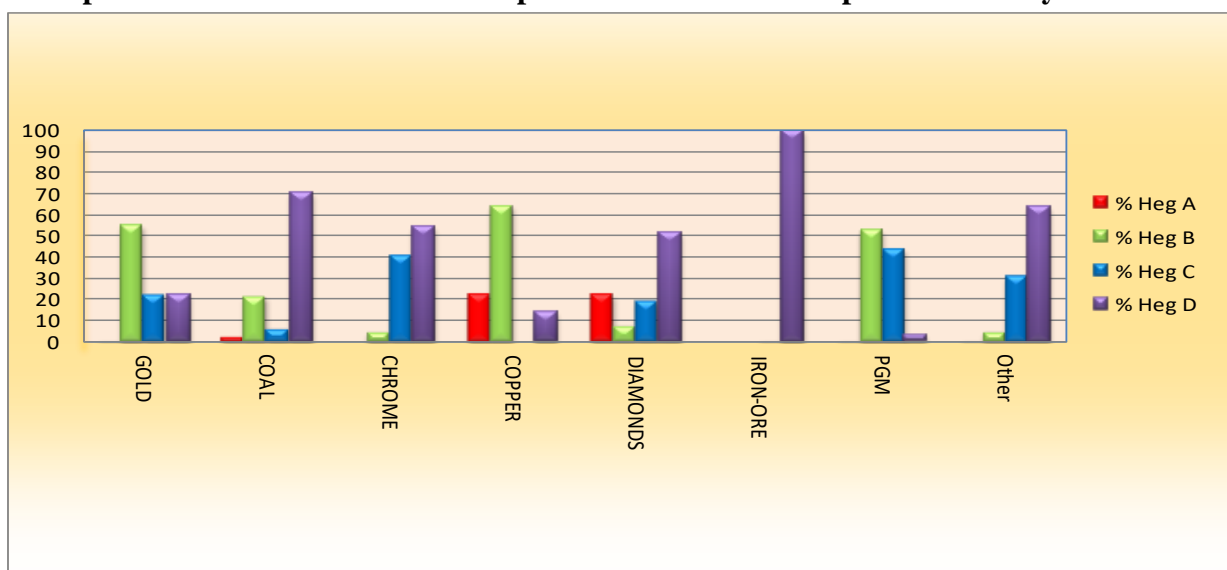
The analysis of data is based on 343 mines that submitted statutory returns suggests that the industry achieved 92% for the 2012 reporting period, compared to 89% in 2011 towards the achievement of the 95% compliance target set in 2003. The samples that were below the 0.1 mg/m³ in 2012 were 3535 and in 2011 were 1717 giving the improvement of 105.9%. There is still more to be done in order to achieve the 2013 milestones as set out in 2003.

% Exposure to Noise per Exposure Classification band per Commodity – 2012



The Chrome, Platinum and Copper commodities have exposures ranging from 4% to 13% in the A classification band, with Gold, Coal and Chrome having exposures ranging from 75 to 80% in noise levels in the B classification band.

% Exposure to Thermal Stress /Heat per Classification band per Commodity – 2012

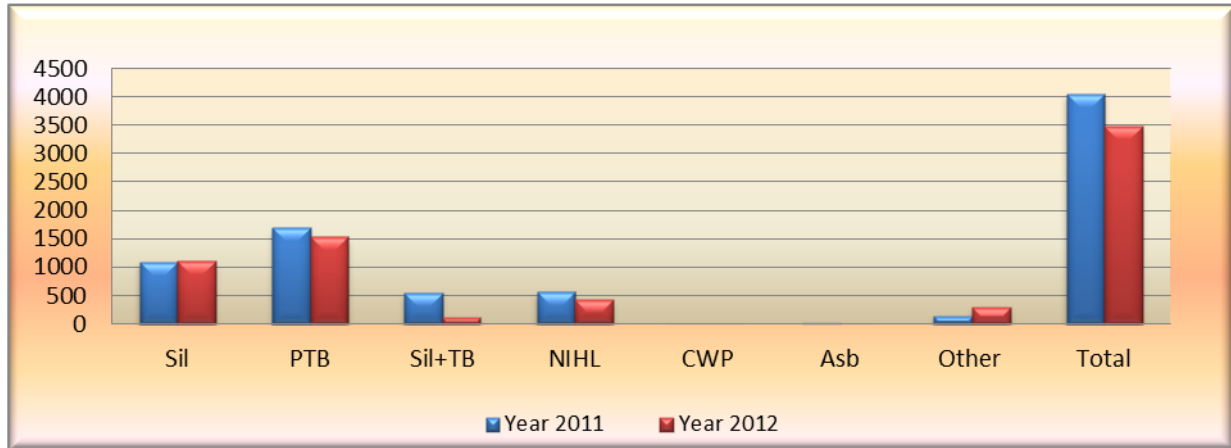




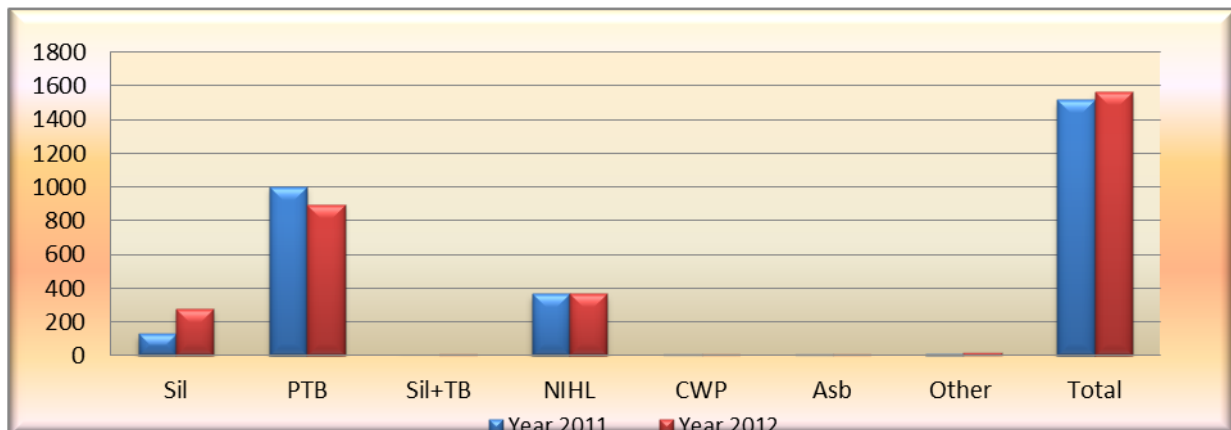
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Occupational Diseases as reported on Gold mines' Annual Medical Reports for 2011 and 2012



Occupational Diseases as reported on Platinum mines' Annual Medical Reports: 2011 and 2012



Occupational Diseases as reported on Coal mines' Annual Medical Reports: 2011 and 2012

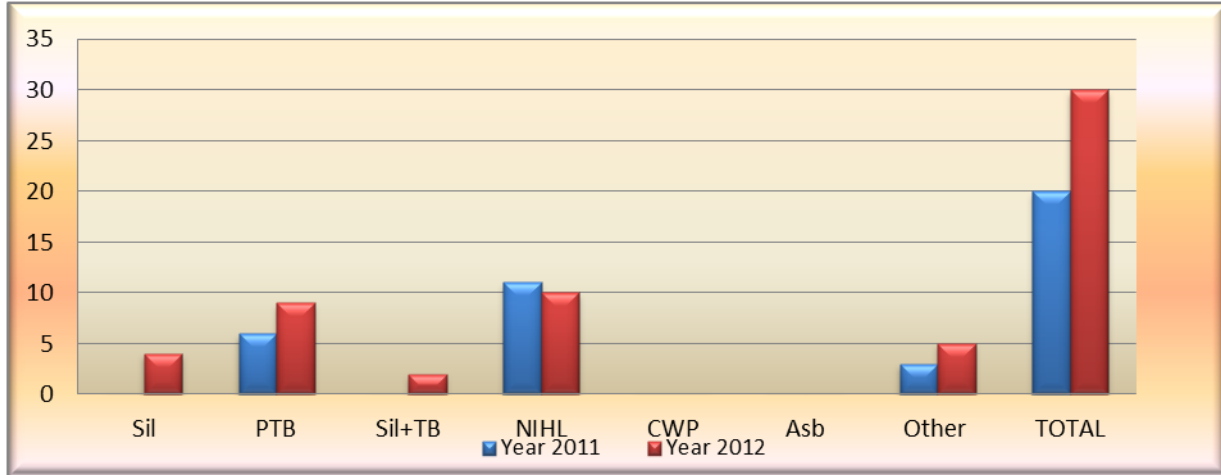




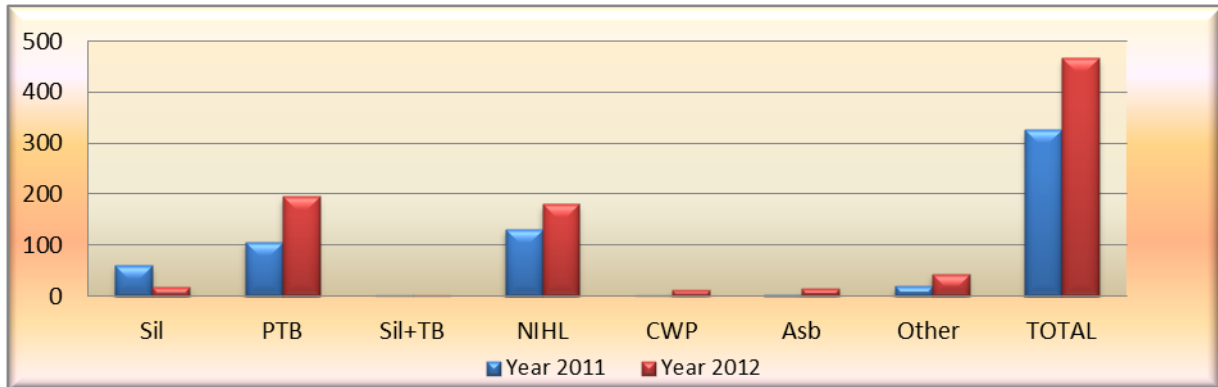
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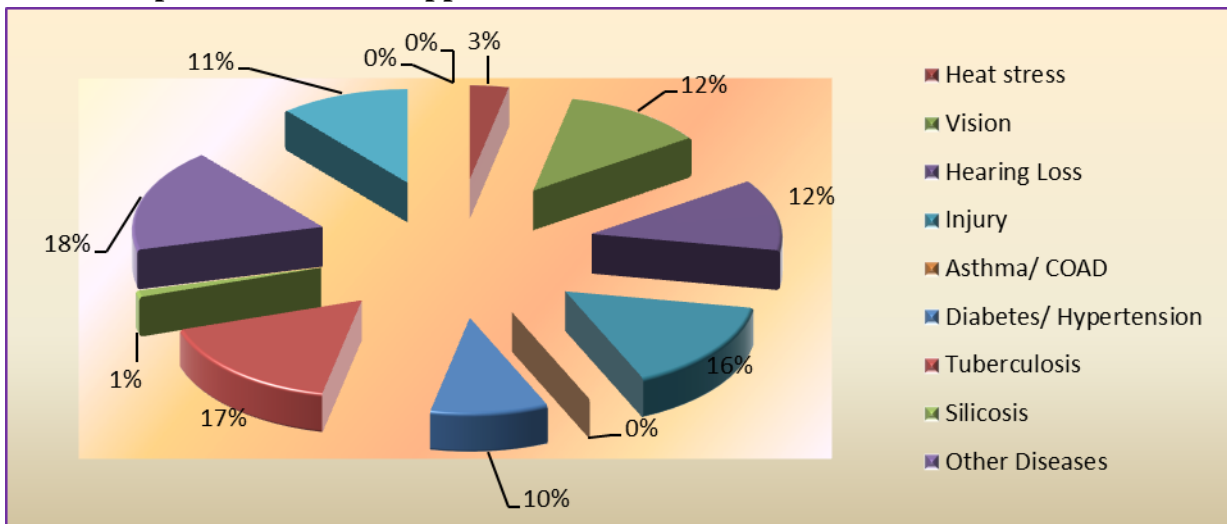
Occupational Diseases as reported on Diamond mines' Annual Medical Reports: 2011 and 2012



Occupational Diseases as reported on Other Mines' Annual Medical Reports: 2011 and 2012



Diseases reported in 2012 for appeals





mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

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In 2012, appeals were commonly lodged against the following diseases: tuberculosis, vision, hearing loss, injuries and other diseases. Tuberculosis is highly disputed by employees as most of them do not accept the fact they could be medically incapacitated due to a curable disease. Some employees respond well to TB treatment, while others don't, but end up with complications which lead to disability and ultimately medical boarding due to ill health.

Other diseases that employees appeal against are the following but not limited to:

Cardiovascular diseases (heart related diseases), Psychiatric disorders (mental illness) HIV related illnesses and Substance abuse.

There were fewer appeals based on Asthma and Chronic Obstructive Airways Disease. This might be due to under-diagnosis or the two diseases are not regarded as occupational diseases



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8. STATUS REPORT ON THE MINE HEALTH AND SAFETY COUNCIL (MHSC) AWARD SCHEME 2014

| No | Mine | Award | Date recorded | Last fatality |
|----|--|---------------|---------------|---------------|
| 1 | Goedgevonden Colliery | Thousand (4) | 15/01/2014 | 23/06/2008 |
| 2 | Zibulo Colliery | Thousand (4) | 05/02/2014 | Never |
| 3 | Forzando North Colliery | Thousand (15) | 18/02/2014 | 15/03/1999 |
| 4 | Mototolo: Borwa | Thousand (2) | 18/02/2014 | 18/10/2011 |
| 5 | Harmony Bambanani Mine | Million (1) | 19/02/2014 | 29/01/2012 |
| 6 | Assmang Iron Ore | Thousand (12) | 22/02/2014 | 12/03/2003 |
| 7 | Marula Platinum Mine | Million (2) | 25/02/2014 | 05/03/2012 |
| 8 | Delmas Colliery | Thousand (3) | 27/03/2014 | 24/03/2008 |
| 9 | Kroondal Chrome | Thousand (6) | 04/04/2014 | 09/04/2014 |
| 10 | Tharissa Minerals | Thousand (1) | 09/04/2014 | 10/05/2013 |
| 11 | Weltevreden Colliery | Thousand (3) | 11/04/2014 | Never |
| 12 | Halfgewonnen Colliery | Thousand (8) | 14/04/2014 | 10/01/2006 |
| 13 | Shiva Uranium Mine | Thousand (4) | 21/04/2014 | 24/08/2010 |
| 14 | Tumela Platinum Mine | Million (1) | 30/04/2014 | 25/02/2013 |
| 15 | Goedehoop Colliery | Thousand (1) | 02/05/2014 | 05/08/2013 |
| 16 | Assmang Manganese (Black Rock) | Million (3) | 20/06/2014 | 23/04/2009 |
| 17 | Tumelo Coal Mine | Thousand (2) | 23/06/2014 | Never |
| 18 | Optimum Colliery | Million (6) | 26/06/2014 | 22/12/2009 |
| 19 | Lonmin Western Mine | Million (2) | 27/06/2014 | 05/05/1013 |
| 20 | Harmony Target 1 | Million (2) | 04/07/2014 | 26/10/2009 |
| 21 | Vaalkrantz Colliery | Thousand (7) | 06/07/2014 | 01/12/2006 |
| 22 | Lonmin Eastern Mine | Million (1) | 17/07/2014 | 26/10/2013 |
| 23 | New Vaal Colliery | Thousand (9) | 30/07/2014 | 09/03/2005 |
| 24 | Lonmin Karee Mine | Million (3) | 07/08/2014 | 26/04/2013 |
| 25 | Mototolo: Lebowa | Thousand (7) | 30/08/2014 | Never |
| 26 | Lace Diamond Mine | Thousand (1) | 02/09/2014 | Never |
| 27 | Two Rivers Platinum Mine | Million (2) | 05/09/2014 | 21/01/2012 |
| 28 | Forzando Colliery: South Mine: | Thousand (9) | 12/09/2014 | Never |
| 29 | New Denmark Colliery | Thousand (1) | 14/09/2014 | 14/10/2013 |
| 30 | Harmony Unisel | Million (1) | 16/09/2014 | 17/07/2012 |
| 31 | Harmony Kusasaletu | Million (1) | 19/09/2014 | 06/02/2014 |
| 32 | Tweefontein Colliery: Underground Operations | Thousand (8) | 24/09/2014 | 11/10/2004 |
| 33 | Tselentis Colliery | Thousand (14) | 28/09/2014 | 05/09/1999 |
| 34 | Koffiefontein Diamond Mine | Thousand (3) | 29/09/2014 | 31/01/2011 |
| 35 | Dorstfontein Colliery: East Mine | Thousand (3) | 29/09/2014 | Never |
| 36 | Landau Colliery | Thousand (3) | 07/10/2014 | 10/01/2012 |
| 37 | Spitzkop Colliery | Thousand (2) | 18/10/2014 | 01/10/2012 |
| 38 | Mafube Colliery | Thousand (7) | 23/10/2014 | Never |
| 39 | Impala Platinum Mine 12 Shaft | Million (5) | 11/11/2014 | 14/10/2008 |
| 40 | Lonmin Platinum: Karee Mine | Million (4) | 15/11/2014 | 26/04/2013 |
| 41 | Finsch Diamond Mine | Million (2) | 20/11//2014 | 17/11/2008 |