

## ENSURING SAFE PRODUCTION

### APPROACH

Our resolve to align all stakeholders on our journey towards achieving zero harm throughout the Group – in SA and in the US remains firm – we focus on creating an enabling environment, using fit-for-purpose systems, in which empowered people can work safely throughout the organisation.

A critical pillar supporting the delivery of Sibanye-Stillwater's business strategy and vision to create superior value for all our stakeholders is the safety, health and well-being of our employees (the most important of our stakeholders). Our approach is rooted in our CARES values – commitment, accountability, respect, enabling and safety – and our purpose to improve lives.

Following an unusual spate of fatal incidents in the SA gold operations in the first half of 2018, we intensified our efforts on safe production across the Group (*see the journey towards zero harm opposite*). In addition to short-term measures to re-energise the focus on safety across the Group (within this section), we convened a series of multi-stakeholder safety summits during the year, which resulted in an agreement between Sibanye-Stillwater, organised labour and the Department of Mineral Resources, on a health and safety compact for the SA operations, signed on 29 June 2018 (*see [www.sibanye-stillwater.com](http://www.sibanye-stillwater.com)*). All three stakeholders have formally committed to working together, in this instance, to make workplaces safer, protect jobs and collaborate in all matters pertaining to health, safety and well-being.

We continue to implement a holistic, values-driven approach to safety and health management as we strive for zero harm and ultimately to create shared value. This embedding of our values, underpinning our corporate culture, driving decision-making throughout the organisation, is led by the CEO and senior leadership. This is essential to building trust and enabling safe production.

Our cultural transformation process is aimed at inculcating values-based decision-making throughout the organisation, and will be governed by external and internal performance monitoring measures including:

- Legislation
- Statutory bodies
- Formal joint management-worker health and safety committees
- Internal and external audits of safety and statistics reported

The initial outcomes of our safety interventions have been positive with a significant improvement in the safety performance across the Group in H2 2018. The Group operations have been fatality-free since mid-August 2018. We recorded a total of seven million fatality-free shifts by 1 March 2019 with the SA operations also achieving seven million fatality-free shifts on 6 March 2017. Group combined injury rates were essentially flat year-on-year with a slight deterioration in injury rates at the SA gold operations and the US PGM operations, offset by a significant improvement in injury rates at the SA PGM operations where the serious injury frequency rate (SIFR) and lost day injury frequency rate (LDIFR) improved by 15% and 0.2%, respectively.

With regard to the implementation of fit-for-purpose systems, while we have operated in accordance with recognised health and safety standards, we are preparing for formal certification in terms of ISO 45001. We have also declared our strategic intent to become a member of the International Council on Mining and Metals (ICMM). This will entail commitment to ICMM's 10 principles, which promote responsible mining to ensure that the industry is safe, fair and sustainable globally.

In addition to performance monitoring and ensuring compliance with the relevant legislation in each jurisdiction, and inspections by relevant government departments and agencies, safety and health performance reports are submitted to executive management with ultimate oversight by the Safety and Health Committee and the Board.

*Refer to the Safety and Health Committee's report in Corporate governance on page 166.*

The safety and health management system used at our US PGM operations is known as GET (Guide, Educate and Train) Safe. In terms of this approach, site leadership and safety professionals conduct monthly meetings to focus on safety culture and monitor progress. This includes routine monitoring of site-specific and region-wide action plans aimed at improving safety performance as well as a series of workshops with site leadership to identify strategies for sustainable safety performance. Key focus areas include senior committee oversight, leadership development, incident reporting and investigation, and collaboration in best practices within the US.

“A critical pillar supporting the delivery of Sibanye-Stillwater's business strategy and vision to create superior value for all our stakeholders is the safety, health and well-being of our employees”

## THE JOURNEY TOWARDS ZERO HARM

Our all-inclusive process to make workplaces safer determines the strategic thrusts and specific actions necessary to reduce employees' exposure to risk.

For us, in an enabled environment, risk exposure is reduced by consistent, constant attention to maintaining a safe workplace with the required equipment, tools and material that empower every person to deliver sustainable, safe production.

Empowered people, in our context, refers to the required number of trained people who apply the relevant standards and procedures, and execute the work safely. To enable this, we make fit-for-purpose systems available to our people. We subscribe to relevant international best practice principles and integrated systems with a view to ISO 45001 certification in the longer term.

Empowered people are also healthy and well. To this end, we also have systems and procedures that address occupational health, in particular, and well-being.

As part of our journey to zero harm, a Virtual Centre of Excellence in Innovative Mining Safe Production has also been created so that 19 tertiary institutions worldwide can share their specialist competencies, including but not limited to mining-related safety and health, human factors, risk management, training modernisation, mining-related seismicity and sustainability concepts.

Furthermore, the Global Safe Production Advisory Panel, composed of a group of leading academics, was formed in 2018 with a mandate to provide international insight, best practice and expertise towards continuous advancement of safe mining.

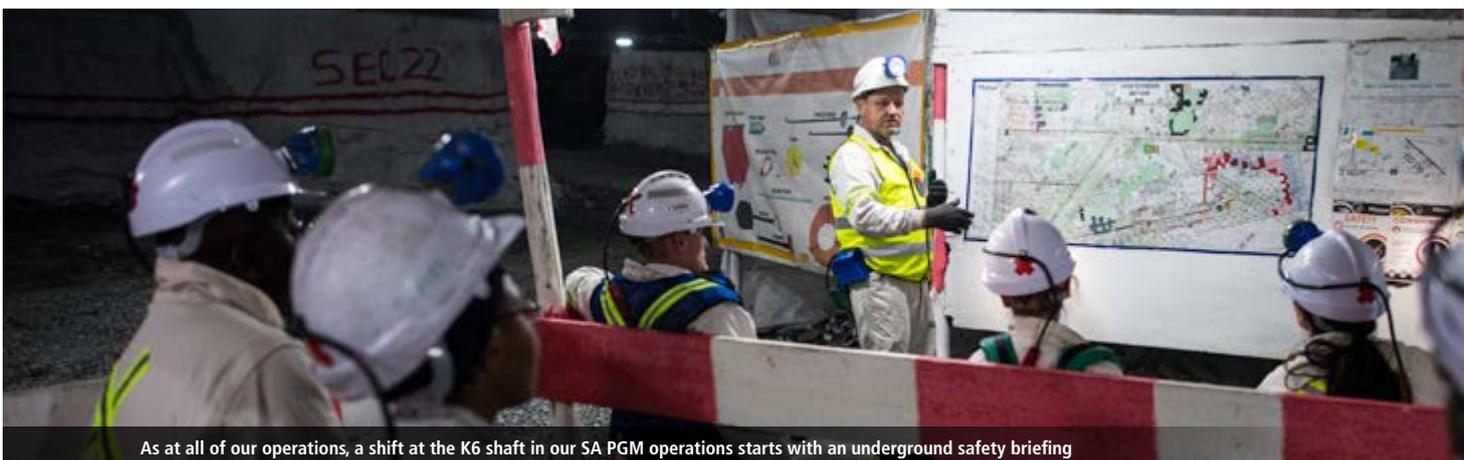
### Global Safe Production Advisory Panel

The aims of the panel are to:

- Review and validate Sibanye-Stillwater's safe production processes and procedures
- Provide forward-looking advice to the Board and management in their view through their university's proprietary work in emerging safe production issues
- Contribute to the organisation's strategic safe production, and health, safety and wellness direction and goals
- Contribute their expertise, insight, ideas and experiences in helping shape strategy for the Sibanye-Stillwater Centre of Excellence with focus on innovative mining and safe production to establish a safety resource website and oversee other related company initiatives

The panel, which will meet at least twice a year, comprises:

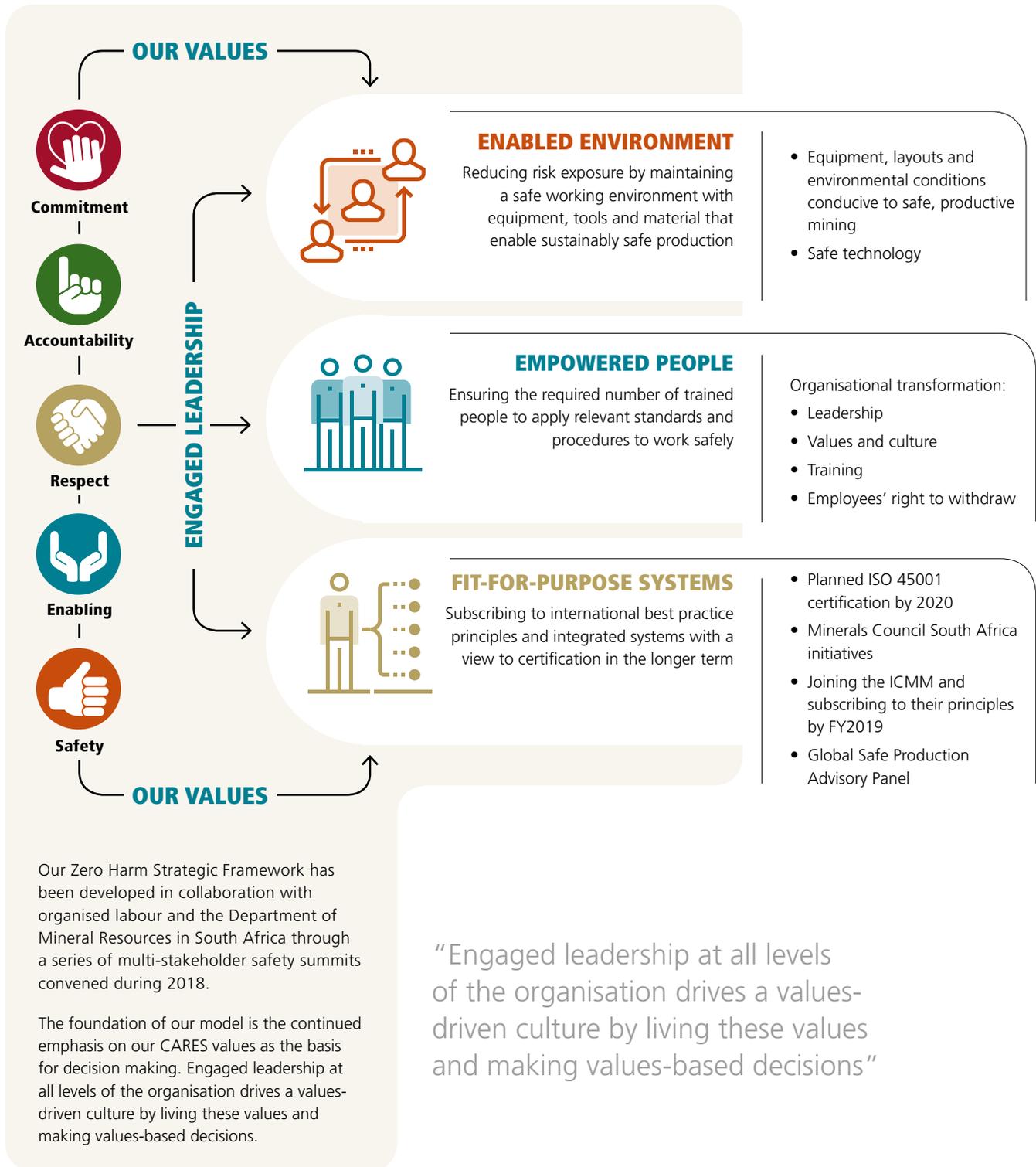
- Dr Kobus de Jager (Chairman of the panel and Senior Vice President at Sibanye-Stillwater)
- Prof Priscilla Nelson (Department Head: Mining Engineering, Colorado School of Mines, US)
- Prof Neville Plint (Director: Sustainable Minerals Institute, University of Queensland, Australia)
- Prof Ian Jandrell (Dean: Faculty of Engineering and Built Environment, University of the Witwatersrand, South Africa)
- Vic Pakalnis (President and CEO: MIRARCO Mining Innovation, Laurentian University, Canada)
- Prof Jürgen Kretschmann (President: TH Georg Agricola University of Applied Sciences, Germany)



As at all of our operations, a shift at the K6 shaft in our SA PGM operations starts with an underground safety briefing

## ENSURING SAFE PRODUCTION CONTINUED

### ZERO HARM STRATEGIC FRAMEWORK



## PERFORMANCE

Our safety performance at our SA operations was markedly different from the first to the second half of 2018. The first six months of the year were scarred by an increase in fatalities. Regrettably, in 2018 we lost 24 (2017: 11) lives at the SA operations – 21 fatalities (2017: 9) at our SA gold operations and three (2017: 2) at our SA PGM operations.

The increase in fatalities at our SA gold operations in H1 2018 was mainly due to two anomalous incidents: a seismic event at Driefontein's Masakhane shaft on 3 May 2018 during which seven employees were fatally injured, and the unauthorised entry of a crew into a barricaded area, which was also closed off by a ventilation door at Kloof's Ikamva shaft, contrary to company policies, on 11 June 2018 where five employees succumbed to heat-related issues.

Another event that received media attention on 31 January 2018 was the loss of power to the Beatrix operations due to an unusually severe

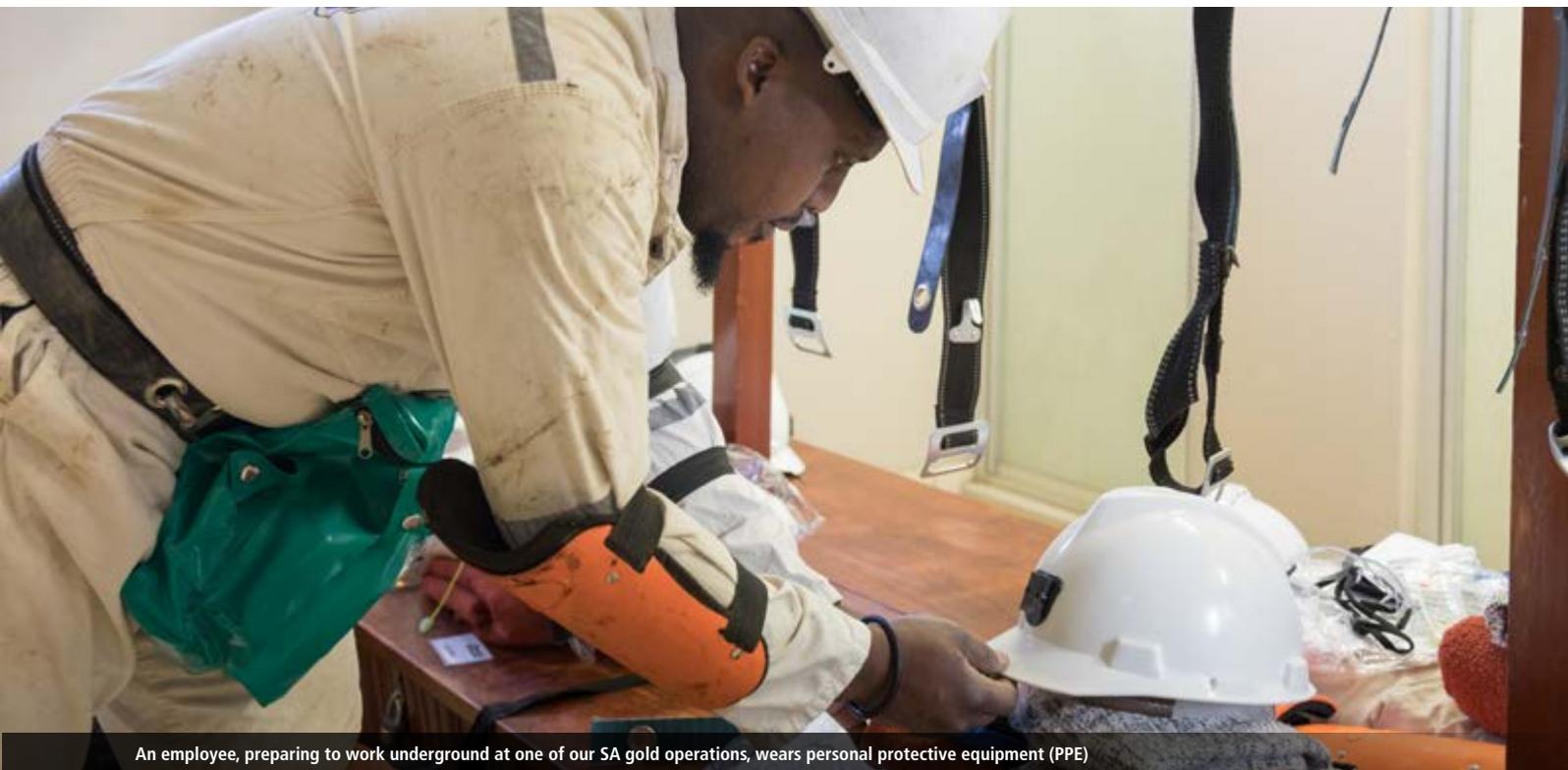
storm, which damaged the main and ancillary Eskom electricity supply to the operations. The situation was well-managed and there were no injuries resulting from the incident. Employees were brought to a safe environment underground at Beatrix 3 shaft where they were fed, hydrated and monitored until power was restored before they were hoisted to surface.

*Refer to our previous 2017 integrated annual report (page 89) and the related fact sheet at [www.sibanyestillwater.com](http://www.sibanyestillwater.com)*

The competent and orderly response by our management emergency medical services, supported by emergency rescue teams throughout the industry, again proved their preparedness and disaster-management capabilities.

**Remedial action:** Immediately after any serious accident, an investigation is conducted in terms of the Mine Health and Safety Act (MHSA) and remedial action is implemented.

“Our safety performance was markedly different from the first to the second half of 2018”



An employee, preparing to work underground at one of our SA gold operations, wears personal protective equipment (PPE)

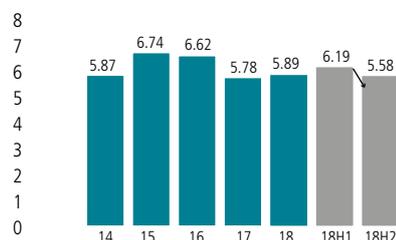
## ENSURING SAFE PRODUCTION CONTINUED

### IN MEMORIAM

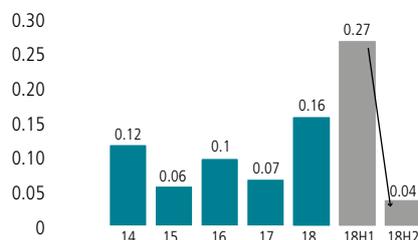
The Board and management of Sibanye-Stillwater extend their deepest condolences to the families, friends and colleagues of our employees and contractors who lost their lives in the line of duty during the year.

Date	Operation	Name	Occupation	Incident
12 February	Kloof 4 (Ikamva)	Chicco Elmon Dube	Winch Driver	Fall of ground
		Solly Ngobeni	Team Leader	
	Driefontein 1 (Masakhane)	Matela Mating	Tramming Miner	Mud rush
17 February	Driefontein 10 (Thabalang)	Zanempi Mncwazi	Electrical Assistant	Electrocution
28 February	Kroondal K6	Otshepeng Ernest Ramosito	Steel Fixer	Struck by conveyor structure
24 March	Rustenburg Khuseleka 1	Ntokozo Elias Ntame	Winch Operator	Scraper winch-related
21 April	Driefontein Ya Rona	Mlungisi Vukuthi	Construction Assistant	Fall of ground
3 May	Driefontein 1 (Masakhane)	Luke Bongumusa Mngomezulu	Special Team Leader	Seismic event
		Baptista Paulino Cuambe	Winch Operator	
		X-Mas Madikizela	Rock Drill Operator	
		Mbulelo Albert Songqowa	Rock Drill Operator	
		Thabo Abram Ntsekhe	Rock Drill Operator	
		Nkosiphendule Dudlela	Rock Drill Operator	
		Luis Ernesto Lumbe Gazala	Winch Operator	
11 June	Kloof 4 (Ikamva)	Lingani Innocent Mngadi	Shift Boss	Heat-related
		Lakhi Msada	Rock Drill Operator	
		Mthokozisi Msutu	Winch Operator	
		Cedrick Nkuna	Winch Operator	
		Khlekile Phelile	Rock Drill Operator	
15 June	Driefontein (Hlanganani)	Thokozani Tembe	Winch Operator	Fall of ground
26 June	Driefontein (Khomanane)	Bhekithemba Thembinkosi Ndabeni	Winch Operator	Scraper winch-related
18 July	PGM Surface Operations	Grace Mlambo	Train Driver Assistant	Struck by locomotive on railway
5 August	Kloof (Hlalanathi)	Philemon Mngakana	Contractor	Heat-related
25 August	Beatrix North	Morapedi Patrick Kalane	Stope Team Labourer	Fall of ground

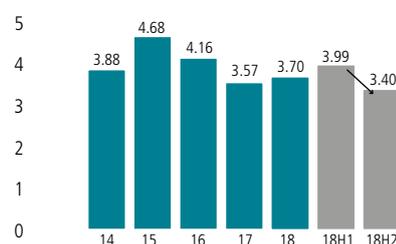
## Lost time injury frequency rate (Group)



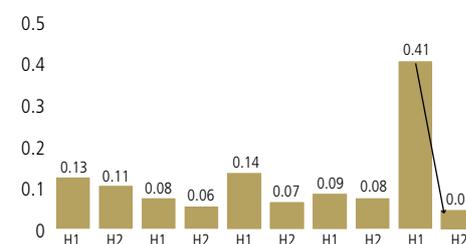
## Fatal injury frequency rate (Group)



## Serious injury frequency rate (Group)



## Fatal injury frequency rate (Gold operations)



## CARING FOR AFFECTED PEOPLE

In line with our values and our duty of care, financial and psychological assistance is provided to the families of our deceased colleagues, including counselling, funeral funds, education of children until tertiary level, employment of a family member and visits by Human Resources (HR), as well as health and safety stewards.

For more information on support of injured employees and families of deceased colleagues, see *Matshediso Programme in superior value for the workforce*

## Safety performance

	2018				2017				2016			2015	2014
	Group	US operations		SA operations	Group	<sup>2</sup> US operations		<sup>1</sup> SA operations	Group	SA operations		SA operations	SA operations
		PGM	PGM	Gold		PGM	PGM	Gold		PGM	Gold	Gold	Gold
Fatalities	24	0	3	21	11	0	2	9	14	2	12	7	12
Fatal injury frequency rate <sup>3</sup>	0.16	0	0.05	0.24	0.07	0	0.04	0.09	0.10	0.09	0.11	0.06	0.12
Lost-time injury frequency rate <sup>3</sup>	5.89	9.97	4.68	6.52	5.78	<sup>1</sup> 7.80	4.69	<sup>1</sup> 6.33	6.62	4.84	6.99	6.74	5.87
Serious injury frequency rate <sup>3</sup>	3.70	7.12	2.20	4.53	<sup>1</sup> 3.57	6.28	2.59	4.12	4.16	2.88	4.42	4.68	3.88
Medically treated injury frequency rate <sup>3,4</sup>	2.69	23.94	1.95	2.32	<sup>1</sup> 2.60	24.65	<sup>1</sup> 2.44	<sup>1</sup> 2.26	3.85	5.72	3.47	3.60	3.37
Number of Section 54/regulator work stoppages	263	NA	44	219	230	NA	26	204	226	55	171	109	77
Production shifts lost owing to Section 54/regulator stoppages	545	NA	149	396	238	NA	49	189	402	245	157	70	99

<sup>1</sup> Restated due to rounding and re-application of Group safety definitions

<sup>2</sup> May to December 2017

<sup>3</sup> Per million hours worked

<sup>4</sup> Also referred to as treat-and-return injury frequency rate (TRIFR), which includes certain minor injuries

Note: Group data for 2016 includes the gold and PGM operations from the relevant dates of acquisition during the year while that for 2017 includes the US PGM operations from May 2017

## ENSURING SAFE PRODUCTION CONTINUED

### ACHIEVEMENTS IN 2018

During the second half of the year, safety performance improved significantly across the SA operations. By year end, we had achieved an historic record fatality-free period and several fatality-free shift milestones. At Stillwater in the US, operations also recorded a new record low incidence rate of 13.16 per million hours.

#### Our performance in perspective: SA peer comparison<sup>1</sup>

Company	Serious injury frequency rate	Serious injury frequency rate ranking	Lost time injury frequency rate	Lost time injury frequency rate ranking	Fatal injury frequency rate	Fatal injury frequency rate ranking
<b>PGM</b>						
Sibanye-Stillwater SA PGM operations	2.20	2	4.68	3	0.050	4
Peer 1	4.25	4	5.93	4	0.022	1
Peer 2	2.83	3	4.07	2	0.026	2
Peer 3	1.29	1	2.10	1	0.027	3
<b>Gold</b>						
Sibanye-Stillwater gold operations	4.53	2	6.52	2	0.24	3
Peer 1	4.98	3	8.21	3	0.07	1
Peer 2	4.01	1	6.22	1	0.11	2

<sup>1</sup> Rates are per million hours worked

### FATALITY-FREE SHIFTS (2018)

+1 million	+2 million	+3 million	+4 million	+5 million
Khuseleka	Thembelani	PGM operations	Total PGM mining operations	Total Sibanye-Stillwater SA operations
Kroondal mining operations	Rustenburg mining operations	Kloof (Thutukhani)	Total PGM mining operations	PGM surface operations (12 million)
Kroondal operations	Kroondal East (Kopaneng, Simunye and Bambanani)	Kloof Upper and Cooke		
Total Kloof	Kroondal surface operations	Gold operations		
	Rustenburg operations	Kopaneng		
Total Driefontein	Gold operations	Total PGM mining operations		
	BMU1 (North and South shafts)			
Bambanani (D6 shaft)	Beatrix			
Sibanye-Stillwater Gold	Driefontein (Ya Rona shaft)			
Beatrix North (3 shaft)	Total plants and concentrators			
Care and maintenance operations	Simunye			
Simunye and Bambanani	US PGM operations			



## 2018 MINESAFE INDUSTRY AWARDS

### Year-on-year safety improvements

For an improved year-on-year total injury frequency rate, our gold operations received MineSAFE awards:

- 1<sup>st</sup> Kloof's Thutukhani shaft
- 3<sup>rd</sup> Driefontein's Pitseng shaft
- 8<sup>th</sup> Kloof's Masithembe shaft

### Best in Class Safety Award

With the total injuries of each participating unit converted into a total injury frequency rate, our SA PGM operations received a Best in Class Safety Award:

- 5<sup>th</sup> Sibanye-Stillwater Chrome Tech (Michael Kungoane)

### SHORT-TERM INITIATIVES

An intensive programme, initially implemented in November 2017, to promote responsible application of the provisions of Section 23 of the MHSA, and which affords employees the right to withdraw from unsafe working conditions, was relaunched in 2018.

To address the distressing spate of anomalous fatal incidents in 2018, specific short-term initiatives were implemented enhance safety performance.

One of these short-term initiatives was a review of our organisational culture and leadership methods to ensure that safety is top of mind in decision-making, at all levels, and to reinforce that all decisions are informed by our CARES values. In addition, at mid-year, the safety performance weightings in management's remuneration packages were reviewed and adjusted (*see Remuneration report on page 176*).

Specific initiatives included:

- Internal and Minerals Council safety day stoppages with signed team pledges
- Additional capacity building of safety representatives and shift bosses
- Introduction of a dedicated anonymous safety hotline
- Introduction of cardinal rules
- 90-day intensive care sessions including communication at all supervisory levels
- Industrial theatre
- Visible felt leadership and crush initiatives with face-to-face interactions when people are coming on shift (current safety message relayed or re-emphasised)
- Mass meetings with all shifts
- Cross audits between different sections (discipline leads from other shafts perform audits in other areas to share best practice)
- Close-out A hazards
- Focus on top five causes of accidents and review of critical controls
- Increased alcohol testing at all access points
- Appointment of psychological counsellors to support employees dealing with relevant matters
- Fatigue management
- Review of bonus schemes for safety officers and supervisors to further promote safe behaviour



At our US PGM operations, an employee prepares to work safely during his shift

## ENSURING SAFE PRODUCTION CONTINUED

### MULTI-STAKEHOLDER SAFETY AND HEALTH SUMMITS

Three multi-stakeholder safety and health summits – in May, June and August 2018 – were attended by representatives of organised labour, the Department of Mineral Resources and senior management. These summits addressed concerns raised at the inaugural summit, and other concerns raised by organised labour on safety days, at memorial services and on the shop floor. All stakeholders committed to working together to make workplaces safer, to protect jobs, and to collaborate in all matters related to safety, health and well-being.

The Department of Mineral Resources, the Association of Mineworkers and Construction Union (AMCU), the National Union of Mineworkers (NUM), United Association of South Africa (UASA) Solidarity and management signed a pledge:

“As organised labour, the Department of Mineral Resources and the management of Sibanye-Stillwater, we acknowledge the parties’ statutory obligation and workers’ right that our destiny is shared and commit ourselves, through constructive, transparent collaboration and compliance, to achieving zero harm”

The summits were convened to align stakeholder expectations with internal initiatives and were intended to embed an organisational culture that supports safe production. The recurring themes noted by the safety working group were people, systems and the environment. Implementation task teams were formed, comprising four representatives each from management and organised labour, who visit sites to monitor progress and provide feedback on the organisational culture transformation, values alignment, leadership development, effective communication, high impact training and safe production issues (as illustrated in the safety summit work streams below).



### RISK MANAGEMENT

As integrated risk management is an essential component of the Sibanye-Stillwater safe production approach, we have increased the use of the bow-tie methodology to enhance critical risk controls.

### SA gold operations

The number of safety-related stoppages at the SA gold operations increased from 204 Section 54s in 2017 to 219 in 2018. Of the 219 Section 54s, 108 were as a result of mass audits by the Department of Mineral Resources.

With low frequency of accidents when they do occur but with high consequences, the top risks in the SA gold operations include seismicity, rock mass failure, vertical transport, rail-bound transport and heat.

Tools, equipment and material were the main contributors to injuries at our gold operations in 2018, representing 25% (2017: 23%) of total injuries. Fall of ground-related injuries accounted for

19% (2017: 17%) of the total. It was encouraging to note an improvement of over 50% (102 to 46) in injuries related to rail-bound equipment as we continue to focus on the following:

- Engagement with stakeholders through safety and health roadshows and awareness campaigns
- Upholding compliance through training
- Converting rail-bound equipment safety devices and no-repeat solutions by engineering out the risk with effective coupling pins, re-railing devices and speed indicators
- Rail inspection and maintenance management system strategy (maintenance programme/schedule for rails and switches)
- Critical learning and close-outs (improving the quality and speed of close-outs and lessons learnt through the safety system)

“In the interests of safety, management continues to focus on key areas of mobile equipment inspection and maintenance”

## SA PGM operations

At our PGM operations, LTIFR performance improved from 4.69 per million hours worked in 2017 to 4.68 in 2018 and the SIFR performance improved from 2.59 in 2017 to 2.20 in 2018.

Low energy incidents remain the main contributors to injuries on duty and contributed 70% towards the total amount of incidents recorded. Interventions are implemented continuously to raise awareness and prevention of these types of incidents through engineering solutions with the implementation of fit-for-purpose tools and equipment, which is enhanced with correct and adequate types and use of personal protective equipment.

Management continues to focus on the top risks of SA PGM operations, which are conveyors, trackless mining equipment, falls of ground, explosives, rail bound equipment, winches and rigging, electricity and material handling, by promoting a health and safety culture through a risk-based approach. In addition to focus on the top risks, a major drive was initiated to analyse all controls to ensure their effectiveness. During the process, critical controls are identified and required resources allocated for less effective controls in order to improve control effectiveness.

Through the introduction of improved industry technology governing the interaction and retardation between machines and pedestrians, the risk exposure is reduced on trackless mobile machinery.

Management remains committed to safe mining by continuously ensuring remedial actions are implemented across all operations. Weekly visible felt leadership interventions are conducted, and learnings are shared and adopted across all operations. The zero harm task team is used to verify actions implemented as well as proactively measuring other safety improvement initiatives highlighted through investigations, statistical analysis and leading indicators.

This integrated approach, adopted and driven by management, assures the improvement of the lives of all our employees, stakeholders and affected parties.

## US PGM operations

We remain committed to maintaining a strong relationship with the union and regulators to continuously improve safety performance in the US PGM operations. The SIFR and total medically treated injury frequency rate (MTIFR) increased to 7.12 (2017: 6.28) and 23.94 (2017: 24.65) per million hours worked, respectively in line with an increase in injuries associated with slips, trips and falls – accounting for 27% (2017: 10%) of total reportable injuries, compared to 10% to 17% in the past five years.

The LTIFR of 9.97 (2017: 7.80) for the US operations includes all reportable/recordable injuries that resulted in either restricted duty or days lost (number of lost time injuries per million hours worked).

While injuries from slips, trips and falls are common across all US industries, our US operations are raising employees' awareness of these injuries, improving tidiness, and improving working and walking surfaces to reverse the trend. No specific cause or condition could be identified to explain the increase in slip, trip and fall injuries during 2018. It is encouraging that only 8% of the reportable injuries sustained up to March 2019 related to slips, trips and falls, following revitalised awareness to these types of injuries throughout the operations.

Historically, 30% of reportable injuries in the US operations involved pneumatic jack leg drills. A total of three reportable injuries (6% of all reportable injuries) associated with the use of a jackleg drill were reported in 2018. Implementation of the drill handling system, which affords lower risk of injury than a jackleg, continues to reduce dependence on jackleg machines and is being embraced by more employers.

In the interests of safety, management continues to focus on key areas of mobile equipment inspection and maintenance, quality training and retraining, workplace audits, ventilation and equipment emissions, and housekeeping. In addition to all employees completing inspections at each shift, an audit team randomly inspects and scores work areas every day. The audit team includes hourly and salaried employees, at each site, solely responsible for evaluating the workplace.

Technology provides timely communication in the event of an emergency and systems installed on mobile equipment warn operators when employees are in close proximity. Implementation of technology at the operations is ongoing with phases planned for implementation every year.

## US PGM operations: Injuries by category

	2018	<sup>1</sup> 2017
Rockfall	4	3
Struck by objects (tools, equipment and others)	12	8
Caught in/between	4	3
Strains	6	3
Operating equipment	4	1
Operating jackleg	3	3
Eye injuries	2	3
Chemical burns/other	1	1
Slips/trips/falls	13	2

<sup>1</sup> May to December 2017

## FUTURE FOCUS

We will continue the current safe production strategy as well as the enhancement of Sibanye-Stillwater's culture, based on and driven by our CARES values, while ensuring that our leadership is ready and engaged, and that desired behaviours and practices (critical attributes, competencies and capabilities) are defined.

A holistic Sibanye-Stillwater safety training strategy, focusing on critical skills as well as training content, methodology, infrastructure and outcomes, is being developed to bolster current training offerings.

Concurrently, we focus on technology as an enabler to improve training competency across the entire organisation and develop partnerships in collaboration with the mining industry to achieve effective skills and knowledge transfer as a long-term initiative.

We are working towards certification in terms of the ISO 45001 health and safety management system, and the roll-out of the bow-tie risk assessment methodology and critical controls.