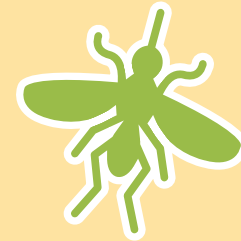


# 3 HEALTH AND SAFETY

Barrick's sustainability vision is to create long-term value for all our stakeholders. We contribute to the social and economic development of our host countries and communities. **We protect the safety and health of our workforce.** We respect human rights. And we manage our impacts on the natural environment, both today and with future generations in mind.



Lost Time Injury Frequency Rate  
**↓33%** for combined Companies<sup>1</sup>



Malaria incidence in our Africa and Middle East region for combined Companies<sup>1</sup>

**↓17%**

All operations to have **safety management systems** that are certified to **ISO 45001** by 2021



Total Recordable Injury Frequency Rate **↓14%** for combined Companies<sup>1</sup>



Dedicated onsite **emergency** response team at all operations

<sup>1</sup> 2018 compared to 2017.

Kibali underground rescue training.



Nothing is more important to us than the safety, health and well-being of our employees and contractors. This is at the forefront of our minds every day as mining has a wide and frequent range of safety risks to be managed with heavy machinery in operation, large volumes of material moved, loud noises, potential rock falls and hazardous chemicals. We are committed to working towards a zero-harm work environment with a safety culture based on personal responsibility and international best practice.

## SAFETY

MATERIALITY  
ASSESSMENT

PRIORITY

HIGH

MED

LOW

Providing a safe and healthy workplace is the most fundamental obligation we have to our employees, to our contractors, to our suppliers and to everyone who visits one of our sites.

### Management approach

One of our first priorities following our merger with Randgold was to update our Occupational Health and Safety Policy. The refreshed policy commits us to provide the leadership and resources required for all our workers to go home safe and healthy every day. It sets clear expectations for all sites to establish and maintain an effective and widely communicated management system that mitigates safety risks and strives for continual improvement. It firmly sets out our commitment to a safety culture that encourages people to proactively manage health and safety risks through education, instruction, information and supervision.



“ I appreciate the safety culture at Barrick. It has taught me to work with the highest safety standards inside and outside the Company. I have fostered safety with my family. I transmit everything I learn here and now my wife and my children also analyze risks and try to do things in the safest way possible. ”

*Emmanuel Reynaldo Acosta Guzmán,  
Infrastructure Technician, General Services, Pueblo Viejo*

In order to implement our corporate policy, Barrick has a Health and Safety Management System which assists the Company in managing risks, complying with legislation and voluntary commitments, conforming to Barrick standards and facilitating continual improvement. Site-specific procedures are also developed to address local requirements and the operational controls that must be followed. Each mine applies a systematic approach to identifying, monitoring and managing safety risk to make it is 'as low as reasonably practicable' (ALARP).

Safety and emergency response training at Pueblo Viejo.



## Integrated governance

Oversight of safety sits within our overall sustainability governance. This means it is not only integrated in our daily, weekly and monthly operational reporting but is discussed at an Executive level as well as a key agenda item at Board Meetings. Each site has a Health and Safety team that reports to the mine's General Manager, as well as indirectly to regional Health and Safety Managers.

Monitoring of mine-level safety performance flows upwards from our sites to Group-level management including our Sustainability Executive and the E&S Oversight Committee. Safety performance forms a key part of discussion and action at our weekly Executive Committee meetings. Information and instruction also flows down this governance chain. For example, the instigation of our Fatality Prevention Commitments (detailed below) this year was rolled down from executive leadership to sites.

We believe in aligning with internationally recognized management standards. Currently, two sites (Kibali and Loulo-Gouunkoto) are certified to the ISO 45001 standard, one of the most widely-respected international management standards for occupational health and safety. Morila and Tongon are certified to OSHAS 18001, a forerunner to the ISO 45001 standard.

We have set a target to certify all of our operational mines to ISO 45001 by 2021.

The compulsory use of Personal Protective Equipment helps mitigate risks.



## Fatality Prevention Commitments

Our renewed focus on safety and reaffirmed commitment to prevent fatalities has led to the Group-wide roll out of new written controls including our ten Fatality Prevention Commitments to help eliminate fatalities and serious injuries. Our 'Commitments and Unacceptable Behaviors' guideline has also been instigated, that reaffirms our zero tolerance of behavior such as working on site under the influence of drugs or alcohol. Both of these controls sought consultation from various levels of the organization with employee input helping shape the documents before they were distributed.

Morning sessions on safety take place every day.



FIGURE 16: OUR FATALITY PREVENTION COMMITMENTS



Barrick's Fatality Prevention Commitments provide the cultural foundation to achieve our Health and Safety vision of 'Everybody Going Home Safe and Healthy Every Day'. We believe that a proper understanding of workplace hazards and controls, combined with effective leadership to guide our decisions and actions creates the safest workplaces.

Our Fatality Prevention Commitments align with the ICMM Life Saving Controls, which are based upon lessons learned from fatal incidents within the mining industry - including Barrick's experience.

## Personal responsibility

Our employees and contractors are expected to understand and comply with workplace rules, regulations and procedures – these requirements are intrinsic to the Fatality Prevention Commitments. Each employee is responsible for their own safety and for ensuring the safety of their co-workers.

The responsibility and authorization to stop any unsafe work is that of every Barrick employee or contractor, so that we 'Do it safely or not at all'.

## SAFETY BEGINS WITH ME

An emphasis on personal responsibility, within a framework of internationally recognized management systems and standards, is at the heart of our safety culture at Barrick.

All workers are expected to take responsibility for the safety of themselves and their co-workers. Mechanisms such as our 'Stop Unsafe Work Authority' gives all workers the right to refuse unsafe work; all personnel are encouraged to do their part to address substandard acts and conditions in the workplace proactively.

This is reinforced by the principles of Courageous Safety Leadership, which have been in place across the legacy Barrick sites for several years. Courageous Safety Leadership provides 'top down' management commitment to safety by training and empowering people at all levels of the organization to speak up and take action to improve workplace safety.

One example of our safety culture is the requirement for underground workers in North America to complete a hazard assessment card to identify and control potential hazards before starting work and throughout their shift to ensure the safety of entrances, travel ways, work areas and mining equipment. Supervisors review these cards with workers to verify the employee has the competency, support and motivation needed to work safely. This approach fully empowers our workforce to create and sustain safe working conditions throughout their entire shift.

# BARRICK

*La sécurité commence par moi*

*Lakana be fols ne yere la*

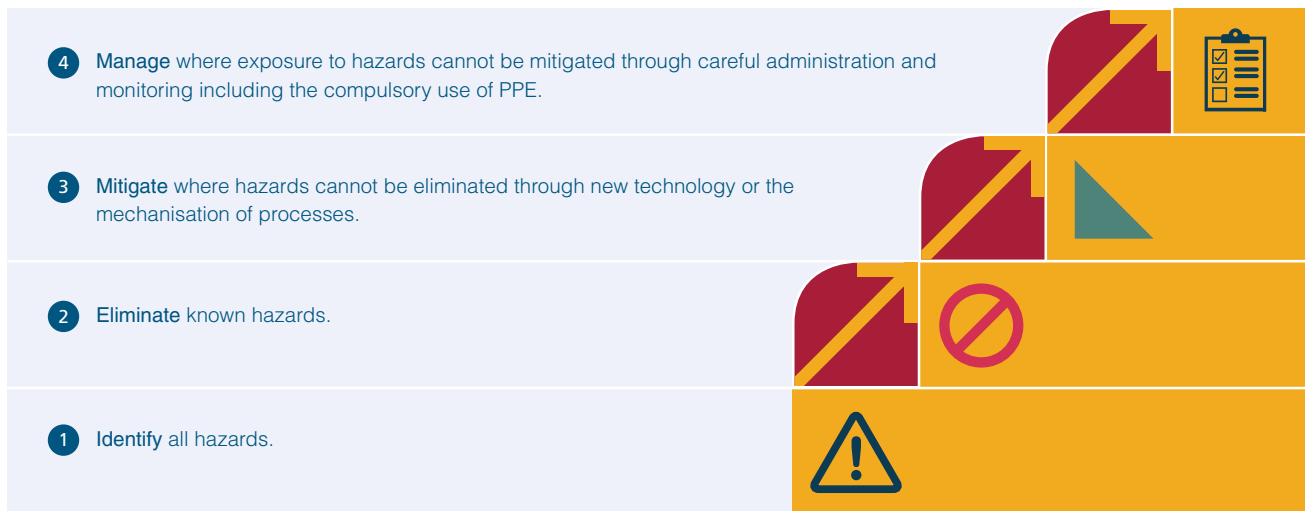
*Safety begins with me*



Une équipe, Une mission • Jekulu kelen hakilinan kelen • One team, One mission • Lisanga moko, Likanisi moko



FIGURE 17: RISK MITIGATION HIERARCHY APPLIED TO SAFETY



To deliver on our safety commitments we:

- **Apply a risk mitigation hierarchy** to eliminate known hazards and where hazards cannot be eliminated, act to mitigate and manage these hazards. We implement a hierarchy of practical controls from Personal Protective Equipment (PPE) to administrative, engineering, substitution and then elimination procedures.
- **Conduct mine-level risk assessments** to inform the safe execution of all mining activities and individual risk assessment prior to any worker or team undertaking potentially hazardous activity. These act alongside regular corporate assurance reviews to identify safety and occupational health hazards and confirm that effective controls are in place and monitored for continued improvement and effectiveness. Potentially hazardous tasks require risk assessments which ask each worker or team to consider the task ahead, to identify what could go wrong and how to manage that risk.
- **Regularly monitor and review our controls and procedures** including through audits, inspections and assurance reviews. This includes checking for a potential failure of controls so that additional or revised controls or activities can be put in place.
- **Provide regular safety training, based on a competency needs assessment** at each mine. The safety training provided ranges from compulsory safety training at induction for all workers and visitors, to specialized safety training for positions with a higher safety risk. Induction safety training includes instruction on worksite hazards and controls and informs personnel of our safety expectations including areas such as incident reporting.
- **Require contractors to meet site safety standards.** We assess contractor safety records and procedures, we monitor safety performance throughout the life of contracts and we provide coaching and support to continuously improve contractor safety performance.
- **Investigate all incidents to determine root causes and prevent repeat events**, as set out in our Health and Safety Incident Reporting and Investigation Standard. We cultivate an open atmosphere that encourages prompt and honest reporting of any notable incident or near miss, without fear of reprisal. We also share lessons learned across sites and analyze the nature, area and reoccurrence of injuries to constantly improve standards across the Group.
- **Translate all relevant safety literature into local languages** and deliver safety training and information in culturally appropriate ways. If required, mine safety teams brief illiterate employees on the meanings of written procedures and safety signage includes symbols, which can be an important consideration in some of the underdeveloped areas where we operate.

Our team continues to assess safety across a wide range of indicators with internal safety reporting metrics now aligned across the expanded Group. Part of our renewed commitment to safety has been to place a greater emphasis on leading indicators. These can serve as preventative warning systems, compared to lagging indicators (such as a lost time injuries) that record events. Leading indicators we have adopted are:

- **SLIs:** In safety, as in many fields, leadership is vital to unlocking people's potential to become better. That is why to inspire General Managers and other site leaders to continually step up safety performance we record the frequency with which they talk to workers about safety and our safety expectations. Each mine has been set a specific number of such 'Safety Leadership Interactions' (SLIs) which it must complete each quarter. We have adopted a corporate goal to complete all planned SLIs at Group level each year.
- **HPIs:** High potential incidents (HPIs) are those near-misses that had the potential of becoming a severe safety incident. All HPIs are investigated and appropriate corrective actions are implemented based on the findings of the investigation.

## Emergency preparedness



We maintain a robust level of emergency preparedness and have plans, resources and training in place to minimize the impact on workers, families, the community and operations should an emergency occur.

All our operations have a dedicated emergency response team onsite and each department has team members trained in first aid to provide care until the emergency response team arrives.

At sites with underground operations, we have specially trained underground rescue teams and all underground operations include refuge chambers where workers can seek shelter in the unlikely event of rock fall or cave in. We carry out mock drills and equipment testing for emergency situations regularly throughout the year and should an employee's reaction to a mock drill be sub-standard, then additional training work is carried out.

All emergency response plans and procedures are widely and regularly communicated throughout the local mine communities. This is part of our commitment to ICMM's Principle 4 which states that members should implement, develop, maintain and test effective emergency response procedures in collaboration with potentially affected parties.

Emergency Response Team (ERT) personnel in North America participate in competitions organized by provincial and state agencies to test the teams' knowledge, firefighting skills, first aid response, use of emergency equipment and decision-making ability under stress in a simulated underground emergency. These competitions ensure that mine rescue volunteers are trained to the same high standards and are fully capable of responding to all types of mine emergencies including fires, explosions and falls of ground. Our ERTs routinely place at the top of the competition including a recent first place achievement by the Hemlo team at the Algoma district competition in Ontario, Canada.

Emergency response drills are conducted regularly at all sites.





## 2018 Performance

Both legacy Barrick and former Randgold sites had a strong focus on health and safety. Neither Company had a fatality in 2018 and, in aggregate, the Companies achieved a 33% year-on-year decrease from 2017 in the LTIFR.

TRIFR across both legacy Companies combined decreased by 14% over 2018. This reflected a 9% decrease from the legacy Barrick sites which had a TRIFR of 1.62 in 2018; and a 16% decrease at former Randgold sites which recorded a TRIFR of 3.32 in 2018.

In 2018, across all sites more than 302,000 hours of health, safety, and emergency response training was provided to employees and more than 236,000 hours to contractors.

Former Randgold also worked with several local suppliers in 2018 to improve their safety standards. The work involved corrective action plans and developing safety reporting systems for the contractors and helped drive 24% and 6% drops in LTIFR and TRIFR year-on-year respectively. It also helped build their capacity for the future.

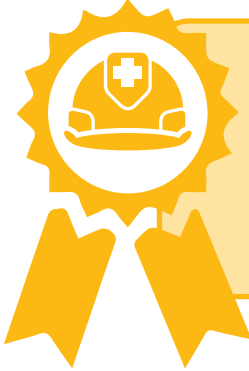
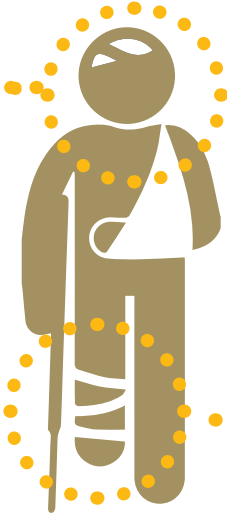
FIGURE 18: SAFETY STATISTICS (EMPLOYEES AND CONTRACTORS)<sup>1</sup>

	Total fatalities	Total LTI	LTIFR (LTI per million hours worked)	Total recordable injuries	TRIFR (Total recordable injuries per million hours worked)
Operating sites					
<b>North America – operations</b>	0	13	1.08	51	4.25
Barrick Nevada – Cortez	0	6	1.52	15	3.80
Barrick Nevada – Goldstrike	0	3	0.63	16	3.34
Golden Sunlight	0	0	0.00	1	3.17
Hemlo	0	1	0.66	12	7.86
Turquoise Ridge	0	3	2.11	7	4.92
<b>LATAM and Asia-Pacific - operations</b>	0	15	0.41	41	1.11
Lagunas Norte	0	2	0.45	6	1.36
Pierina	0	0	0.00	2	0.85
Porgera	0	6	0.57	11	1.04
Pueblo Viejo	0	3	0.26	11	0.95
Veladero	0	4	0.50	11	1.38
<b>Africa and Middle East</b>	0	11	0.26	101	2.41
Jabal Sayid	0	0	0.00	0	0.00
Kibali	0	2	0.15	25	1.93
Loulo-Gounkoto	0	4	0.47	46	5.40
Lumwana	0	3	0.27	8	0.72
Morila	0	2	0.96	5	2.39
Tongon	0	0	0.00	17	3.81
Exploration	0	0	0.00	2	2.07
Closure sites	0	2	6.24	3	9.36
Projects	0	2	0.88	2	0.88
<b>2018 Total</b>	0	43	0.46	200	2.12
<b>2017 Total</b>	4	63	0.68	227	2.46

<sup>1</sup> Note that frequency rates are based on 1 million hours worked, a change from the methodology used in previous Barrick reports.

# TARGETS FOR 2019 AND BEYOND

Achieve a TRIFR<sup>1</sup> of **2.02** or lower  
**↓ 5%**



Certify all operational mines to **ISO 45001** Health and Safety standard by the end of 2021



Complete **100%** of planned 'Safety Leadership Interactions' at Group level

Achieve an LTIFR<sup>1</sup> of **0.43** or lower  
**↓ 5%**



<sup>1</sup> Compared to the combined legacy Companies in 2018.



# OCCUPATIONAL HEALTH

MATERIALITY  
ASSESSMENT

---

PRIORITY

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HIGH

MED

LOW

Mining and its associated processes can expose workers to a range of occupational health hazards. These could include respiratory problems, long-term strain injuries and damage to hearing or mental health. These require careful management to reduce the risk of them developing into serious health problems. We are determined to protect our workforce from such impacts through our occupational health and wellness activities.

## Management approach

Our aim is for a zero-harm workplace and our approach to achieving this is set out in our new Occupational Health and Safety Policy. We apply a systematic approach to anticipating, identifying, evaluating, controlling and monitoring occupational health hazards and exposures.

Key aspects of this include:

- **Diligent monitoring and control of potential occupational health hazards** including job specific risk assessments and use of engineering controls such as ventilation systems to reduce exposure to dust, gases or fumes.
- **Regular medical checks for employees** including blood tests for heavy metals, hearing tests and respiratory monitoring for lung issues. These are carried out pre-employment and at regular intervals to track whether workplace hazard controls are effective at maintaining employee health and well-being at pre-employment levels. Staff regularly exposed to hazardous chemicals receive additional regular biological and radiation testing.
- **Promoting opportunities to improve personal health behaviors** with a number of sites having wellness initiatives in place including stop-smoking programs and travel security training.
- **Awareness raising and management of fatigue** including fatigue avoidance training courses for shift workers, such as 'Managing a Mining Lifestyle', and fatigue monitoring by supervisors to make sure workers are ready for duty. In 2019, we will begin the roll out of in-vehicle fatigue monitoring systems.
- **Activity to reduce health issues in the wider community** that will have an impact on the workforce and business objectives, most prominently in the case of our stand-alone malaria and HIV/AIDS programs in the AME region.

Barrick employees receive regular check-ups.



Odontological, ophthalmological, audiometric, dermatological and general health campaigns are carried out.



## 2018 Performance

All workers (100%) in 2018 were covered by our occupational health and safety systems.

Across legacy Barrick sites there were 13 occupational health issues in 2018. These included six cases of noise induced hearing loss, two cases of hand arm vibration syndrome, two of carpal tunnel syndrome and one case each of chronic obstructive lung disease, tendinitis and repetitive strain injury. Among former Randgold sites there was one occupational disease diagnosed in 2018, that was a case of musculoskeletal disorder (disc herniation) at Tongon. All cases are being treated by on-site medical teams or have been referred to external health care providers for long-term treatment.

## Malaria and HIV programs

Access to healthcare is an acute challenge for most host communities in our AME region. At the former Randgold mines we have advanced and detailed programs in place to reduce two of the biggest health challenges facing our communities in the region: Malaria and HIV/AIDS.

### Malaria

The four former Randgold sites (Kibali, Loulo-Gounkoto, Tongon and Morila) provide complimentary basic medical care, including treatment for malaria to their workforce, their immediate families and to all community members living within a 15km radius of our mines. The standalone program sees the wide distribution of disease controls including mosquito nets and spraying programs (see NET BENEFITS).

The results of its malaria reduction activity in 2018 were very encouraging and saw the malaria incidence rate across the four former Randgold mines drop by 16.6% compared to 2017, bringing the malaria incidence rate to 22.8%.

Lumwana is the only legacy Barrick mine with significant malaria incidence and this has now been included in an expanded malaria program. When Lumwana is included, the baseline malaria incidence rate for the AME region in 2018 was 20.4%.

### HIV/AIDS

To reduce the spread of HIV and AIDS in our host communities, the former Randgold sites partnered with expert local HIV-focused NGOs to develop and deliver awareness raising and education programs, distribute free condoms and to promote voluntary counseling and testing (VCTs) to provide counseling to anyone who tests positive and arrange referrals for antiretroviral drugs.

In total the former Randgold's HIV/AIDS program in 2018:

- Distributed more than **313,000** condoms
- Provided more than **11,000** free VCTs to our workforce and local community, an increase on 2017
- Saw HIV prevalence rates drop from 1.33 to **1.02** across the former Randgold mines



FIGURE 19: MALARIA INCIDENCE AND VCT RATES FOR AME REGION (COMBINED COMPANIES)

	2018	2017
Malaria incidence rate <sup>1</sup>	20.4%	24.6%
Amount of voluntary counseling and testing (VCTs) conducted	11,962	7,775

<sup>1</sup> Number of new positive cases x 100 / Total employees during the reporting period.



## TARGETS FOR 2019 AND BEYOND

Certify all operational mines to

**ISO 45001**

Health and Safety standard by end 2021



Ensure


**baseline risk assessments**

and associated action plans on occupational health conducted at all sites

**↓ 5%** annual malaria incidence rate in Africa and Middle East



### INTEGRATING THE SUSTAINABLE DEVELOPMENT GOALS

<p><b>SUSTAINABLE DEVELOPMENT GOALS</b></p>	<p><b>3 GOOD HEALTH AND WELL-BEING</b></p> 	
<p><b>Overview contributions</b></p>	<ul style="list-style-type: none"> <li>■ In 2018 the combined Companies invested over <b>\$1.2 million</b> in community health programs.</li> </ul>	
<p><b>Snapshot example</b></p>	<ul style="list-style-type: none"> <li>■ In the AME region we have <b>stand-alone campaigns</b> to reduce <b>malaria</b> incidence, the prevalence of <b>HIV/AIDS</b> and to improve <b>road safety</b>.</li> <li>■ In 2018 the malaria incidence rate in our AME region <b>reduced</b> from 24.6% to <b>20.4%</b> of our workforce compared to 2017.</li> </ul>	

## NET BENEFITS: BOOSTING PRODUCTIVITY BY COMBATING MALARIA

Around 90% of all malaria-linked deaths occur in Africa and the disease causes enormous human and economic costs.

At the four mines run by former Randgold, malaria accounted for approximately 20-25% of annual worker absences. Thus, it is in the interests of our business and the welfare of our workforce and host communities in the region that we invest in meaningful steps to eradicate malaria from our operations in Africa.

In 2018 the former Randgold spent more than \$680,000 on initiatives to combat malaria. Efforts included:

- Distributing more than 13,700 insecticide impregnated mosquito nets
- Larvaciding within a 10km radius of each of our mines
- Working with an entomology consultant to understand which chemicals will be most effective to spray at each site
- Training staff on correct chemical spraying techniques and expanding the areas sprayed
- Providing insect repellent to night shift workers, who are particularly exposed to the disease
- Providing prophylactic anti-malarial medication to all workers at our West Africa operations during the four-month transmission season

In host communities such as those in Mali, Côte d'Ivoire and the DRC these actions have driven malaria incidence down dramatically from the baselines set before operations began. Incidence has reduced in 2018:

- From 132%<sup>1</sup> (2010) to approximately 32% around Tongon in Côte d'Ivoire
- From 113% (2011) to approximately 13% around Kibali in DRC
- From 192% (2000) to approximately 10% around Morila in Mali
- From 74% (2011) to approximately 28% around Loulo-Gouunkoto in Mali

Many of these practices are now being applied at Lumwana in Zambia.

<sup>1</sup> Note that as malaria can be contracted more than once, incidence can rise above 100%.

Spraying for mosquitoes.

