Protecting, promoting and enhancing the health and wellbeing of our people is as vital as protecting their safety. We do this by identifying and managing the key occupational health risks to which they are exposed. This includes minimising occurrences of occupational illness, supporting our people to lead healthy lifestyles that contribute to their fitness for work, and helping them remain healthy as they travel and work at our more remote sites.

We operate in a number of countries where the prevalence of HIV/AIDS, tuberculosis (TB), malaria and other tropical diseases is high. As well as managing these diseases in the workplace, we are committed to helping establish health programmes for our local communities, and where appropriate, working closely with other stakeholders to do so.

As part of our commitment to continuous improvement, we report our performance against our new Group health targets, which include:

- A year-on-year improvement in the rate of new cases of occupational illness per 10,000 employees.
- The requirement that by 2015, all managed operation to have reviewed – and increased their focus on managing – their health risks, through implementation of critical control management plans to address their specific material health risks.

During 2014 we revised our Health standards to simplify and integrate them more effectively with the Rio Tinto management system and sharpen our focus on material risks for the Group. Our aims were threefold:

- Encourage improved ownership of Health standards by leaders at our operations.
- Provide a consistent framework for managing health risks in an efficient and effective way.
- Ensure we are managing the potential impacts and risks related to our operations in order to make our workplaces safer.

The new standards come into effect on 1 April 2015, at which point our businesses will begin to implement them. We will begin to audit and report our performance against them from 1 July 2016. In the interim period our businesses can choose to be audited against either the current or the revised standards.
Health: Community health and medical emergency response

Keeping healthy worldwide

Our health management approach goes beyond the workplace. At many of our sites, we have recognised the importance of establishing community health programmes (for example for HIV/AIDS, malaria and tuberculosis). This is important for our local communities as well as our workforce, who are all exposed to the local health conditions. Travel health issues – including the availability of adequate emergency medical response – are also a concern as we expand our operations into less developed regions of the world.

Approach

Rio Tinto operates in a number of countries where the prevalence of HIV/AIDS, tuberculosis (TB), malaria and other tropical diseases is high.

We are committed to helping our communities enhance their capacity for managing these diseases. As part of this, we collaborate with government agencies and non-governmental organisations (NGOs), as well as relevant local organisations.

We have also worked with the International Council on Mining and Metals (ICMM) and other major mining associations to produce practical guidelines for the industry to improve the management of these diseases.

We will continue to pursue opportunities for private-public partnerships to expand our community health programmes into our communities.

Dealing with HIV/AIDS and tuberculosis in the workplace

The global epidemic of HIV/AIDS poses a serious threat to the health of employees, their families, and communities surrounding mining and minerals operations. We have had an HIV standard in place for several years, which has helped our workplaces to achieve HIV prevalence rates significantly lower than in surrounding communities. However, the success of our workplace programmes will ultimately be influenced by the ability of surrounding communities to develop effective prevention and treatment responses to the HIV epidemic.

We take our lead from the International Labour Organization Code of Practice on HIV/AIDS. We do not tolerate discrimination towards employees who are diagnosed with the disease. Nor do we screen for it during the recruitment process, or use screening as a condition of employment.

We have a global, risk-based standard that has four key workplace components:

- prevention, awareness and education
- voluntary counselling and testing
- wellbeing, counselling and treatment
- monitoring and evaluation, using ICMM’s Good Practice Guideline on HIV/AIDS, TB & Malaria, which identifies key indicators that should be regularly measured
Health: Community health and medical emergency response

Where we have operations in regions with a generalised HIV epidemic (as defined by UNAIDS) we actively encourage all employees to know their HIV status through voluntary testing. In this way, each worker can take the necessary steps to remain infection-free if negative, or avoid spreading the infection and quickly access the appropriate support and treatment if positive.

Employees infected with the HIV virus have reduced immunity and are also at increased risk of developing TB, which often leads to death when no treatment is available. We are currently working to raise the profile of TB in high-prevalence areas and have included TB in our revised Health standards, which require employees to have access to an integrated HIV/AIDS and TB management programme.

Malaria and other tropical diseases
Malaria remains a significant problem in many developing countries, primarily in Sub-Saharan Africa (60 per cent of clinical cases and 80 per cent of global mortality), Latin America and Asia. Malaria is a significant health risk for employees based in affected regions and for those seconded or travelling to operations located in endemic areas.

We have included malaria in our revised Health standards and revised our Malaria Management Framework. A Malaria Hotline is available to all employees 24 hours per day/seven days per week. The hotline is intended to provide advice and support to identify the signs and symptoms of malaria as well as on general preventative initiatives or measures.

We continue to provide support to our businesses in developing effective malaria programmes and we communicate the Rio Tinto recommendation for expatriates and visitors to endemic malaria areas to take malaria prevention medication.

Travel health issues and medical emergency response
International travel, particularly to developing countries, can pose significant health risks that have a very real possibility of resulting in illness and even death. In addition, serious health risks may arise in areas where accommodation is of poor quality, hygiene and sanitation are inadequate, medical services are not well developed, and clean water is unavailable. We have mandatory minimum requirements for emergency medical response provisions at our sites.

We have developed pre-travel medical checks, which are being offered to business travellers at most of our key locations since 2010. We have also developed and implemented a pre-assignment medical check programme for international assignees and their families, and have reviewed the medical emergency response capability of our high-risk sites. We maintain ongoing support for medical emergency response and evacuation.

In 2014 we updated and expanded the scope of our Pandemic Influenza Framework to include other diseases such as Ebola, integrated pre-employment medicals into the existing pre-assignment medical check programme, offered post-assignment medicals for assignees returning from high-risk locations, and continued to oversee the appropriateness and adequacy of on-site medical facilities for our remote sites.

Results
The number of medical emergency cases among business travellers and international assignees decreased by 40 per cent in 2014 compared with 2013 (319 cases in 2013 and 191 in 2014). The most common causes for a medical emergency among Rio Tinto business travellers and international assignees in 2014 were musculoskeletal injuries and gastrointestinal disorders, followed by cardiovascular conditions. There were eight emergency medical evacuation cases in 2014.

March 2015 marks one year since the World Health Organisation (WHO) was notified of an outbreak of Ebola in West Africa. In Guinea, where we have operations, 2,730 cases were reported and 1,739 deaths since the outbreak began. Responding to the outbreak, a Rio Tinto Business Resilience Team was established and a number of control measures have been implemented in partnership with the Guinean Government, WHO and other international organisations. We have put prevention measures in place both for our employees and the local Guinean communities. We have supported the Government and communities through awareness raising and providing logistics and food. As part of our efforts we have organised and conducted prevention and awareness campaigns, distributed hygiene kits and provided support to local hospitals with protective equipment and medical supplies. To date, none of our employees or their families in Guinea have been affected by the disease.
Managing malaria in Madagascar

Malaria is a leading cause of death in Madagascar. As a developing country, Madagascar has very little public health infrastructure, which is hampering the fight against the disease.

Rio Tinto’s QIT Madagascar Minerals operation (QMM) supports the local malaria control initiative, which is run by government departments, international NGOs and other stakeholders. The company’s involvement has included supporting training programmes – for its workforce and the community – and providing mobile equipment and education materials.

This work has helped reduce the risk of malaria transmission, the number of mosquitoes, and the prevalence of the disease within the local population. The most vulnerable members of the population are children under the age of three and pregnant women. Young children constitute a significant percentage of the Malagasy population and focusing on them is critical.

In 2014, QMM supported a programme to help reduce the prevalence of malaria in the area around the local hospital, where most of the cases of the disease among QMM employees and their families were occurring.

The programme found that complicated cases of malaria were being treated in the hospital without the use of protective nets around the beds. Most of the mosquitoes in the area were therefore being infected, contributing to an elevated transmission rate.

A multi-pronged approach was put in place to help address this situation. QMM’s Community Relations department collaborated in a sanitation campaign, to reduce the mosquito population in the area. In collaboration with the chief medical officer and a representative of Madagascar’s Health Ministry, the company provided nets and the labour to install them on all beds in the hospital. Hospital management also committed to make the use of bed nets mandatory. QMM also collaborated with a local NGO to increase knowledge about malaria in the local population, providing awareness sessions every day at the beginning of the sanitation work.

As a result, the rate of malaria in communities surrounding the hospital is now relatively low compared to the first half of 2014.

QMM is working in partnership with its stakeholders to help tackle one of the country’s most serious health risks.

For more case studies:
riotinto.com/sd2014/case-studies
Health: Managing occupational health risks

Minimising health risks at work

Like any responsible employer, we take steps to minimise illness that develops as a result of conditions and exposures in our workplaces. The nature of our business means we are especially vigilant about illnesses caused by exposure to excessive dust, fumes, noise, manual tasks and to all forms of radiation. Our goal is no new cases of occupational illness.

Approach

We treat an illness as “occupational” if conditions in our workplace are thought to be the cause or to worsen it. The workplace does not have to be the only cause of the illness.

In 2004, we introduced our Group-wide occupational health standards to improve identification and management of health risks. These were revised in 2014 and are integrated with our custom-built and recently revised Rio Tinto management system to ensure consistent Group-wide application, on an exposure risk basis. We audit implementation of our standards regularly and also benefit from sharing leading practices across the Group.

Some of our workers are more sensitive than others to contracting workplace-related illnesses. We emphasise prevention by specifically monitoring the individual’s exposure to potentially hazardous agents in the workplace and any potential impacts of these on their health. We then seek to implement appropriate exposure controls where relevant.

We have set a new Group target that requires all managed operations to have reviewed – and increased their focus on managing – their health risks, through implementation of critical control management plans (CCMPs) to address their specific material health risks, by the end of 2015. These plans establish an approach for monitoring the performance of critical controls against material health risks at individual sites.

We have rolled out guidance and training in identifying and assessing critical health risks. We have also developed a formal process for identifying material health risks and critical controls. Critical control monitoring plans are then developed and implemented for these risks, in support of our post-2013 target.

Performance measures and targets are being established for each critical control. This approach will allow our businesses to direct their resources at the health risks that matter at their sites.

To support consistent data quality, management and analysis, we continue to roll out software for managing occupational/industrial hygiene and medical surveillance data. In 2015, we are reviewing our options to upgrade this software.

Lung diseases related to long-term dust exposure are now rare in our workforce, demonstrating the effectiveness of our dust and fume control programmes. We have also made significant strides in reducing the number of new cases of occupational asthma within our aluminium smelters.

Heavy equipment tends to be noisy, which is why noise-induced hearing loss (NIHL) is still a problem for us. While we recognise that further reductions in noise exposures for our employees will prove challenging, we are committed to continuing to improve our performance. We continue to develop engineering solutions and alternative ways of doing our work with reduced noise levels. We have a noise community of practice to share learnings and help develop more effective noise improvement strategies.

Musculoskeletal disorders remain a common form of new occupational illnesses, despite advances in technology rapidly reducing physical demands on our employees. We are continuing to seek ways of engineering out heavy lifting tasks and are reviewing available and proven ergonomic solutions to see if they can be applied more widely. We use a dedicated software package to improve the assessment and sharing of controls for manual handling risks.
Health: Managing occupational health risks

Results

In line with our standards, we continue to work on reducing radiation exposure to as low as reasonably practicable. Our monitoring has not recorded any employee above our 20 milliSievert (mSv) annual exposure limit for over a decade. Rio Tinto’s exposure limit is well below the five-year 20mSv and annual 50mSv limits typically found in international protocols.

In recent years, while our rate of new cases of occupational illness at Rio Tinto operations has been decreasing, the rate of decrease has lessened. We are targeting a year-on-year reduction in the rate of new cases of occupational illness per 10,000 employees. The main types of occupational illnesses recorded since 2008 are related to musculoskeletal disorders, noise-induced hearing loss and stress. We exclude operations that were divested or flagged for divestment during 2013/14 from our target.

In 2014, we achieved a six per cent improvement in performance compared with 2013, with significant decreases in the number of reported cases of noise-induced hearing loss (77 per cent) and stress (seven per cent), traditionally among our largest contributors. This meets our target. Musculoskeletal disorder cases (49 per cent) dominated our illness cases for the year.

We will continue to target a year-on-year improvement in the rate of new cases of occupational illness per 10,000 employees annually. Ongoing reductions in new cases of occupational illnesses will require further improvements in the management of risks posed by manual handling and noise exposure, as well as managing fatigue and supporting healthy lifestyles through workplace wellbeing and stress management programmes, where these are considered material health risks.

Our target of implementing critical control management plans to address material health risks is progressing well. Already 41 per cent of businesses have met the target, with the majority of the remaining businesses confident of meeting the target by the end of 2015.

[Interactive charts: See our performance in the interactive charts: riotinto.com/sd2014/interactive-charts]
In occupational health risk assessments, a health professional typically identifies hazards, then monitors and reviews exposures. This long-accepted approach, whilst robust, has historically had limited input from employees.

Rio Tinto has therefore modified the process, basing it upon a semi-quantitative approach that it currently uses to understand its safety risks. This rigorous assessment now includes frontline employees in identifying causes and controls of occupational health risks in their working environment.

The controls being used are then analysed, to determine those that are critical to success, and to make sure that they are adequate. Using this information, a management plan is created to ensure these critical controls operate as designed. This improves the analysis of health risks and increases practical input from the workforce.

The method can also include actual exposure measurements and limits to produce a numerical rating that outlines the level of critical risk. It results in a better understanding of occupational health risk and its control by line management and the workforce across operations.

A new approach ensures employee input into occupational health risk assessments

For more case studies:
riotinto.com/sd2014/case-studies
Managing fitness for work

Promoting healthy lifestyles

Protecting and promoting our employees’ health and wellbeing is vital. We believe in supporting our people in leading healthy lifestyles, so that health-related risks such as fatigue, stress and obesity, and diseases such as HIV/AIDS and tuberculosis, will have less impact on their safety.

Approach
The nature of occupational illnesses is changing. Health conditions such as stress, fatigue and the normal results of ageing, such as reduced physical capacity, present different challenges from traditional mining health issues. We recognise that in some of the countries in which we operate, musculoskeletal conditions and heart disease are more prevalent due to an ageing workforce. Our health results also show that stress and fatigue are becoming more common, perhaps in part because we are becoming more effective at identifying, understanding and managing these factors in the workplace.

Across many industries, the potential for mental health problems to lead to short and long-term disability, employee turnover and occupational injuries is becoming better understood. In order to support our workers in this area, we have taken a closer look at what is currently being done both within and outside Rio Tinto.

We also recognise that fatigue contributes to many safety incidents. Fatigue management is a shared responsibility between the company and its personnel, and is also influenced by personal circumstances, behaviours and actions.

Results
In 2014, our health and wellbeing networks shared best practices. We identify lessons learned in the various businesses and share them within the region and beyond. Collaboration between the different businesses is encouraged when a common wellbeing issue is identified.

Having collected internal and external best practices, we are now finalising our mental health management framework. This will look broadly across the field, from responding effectively to someone in crisis, to demystifying mental health and ultimately improving wellbeing and resilience.

We also continued our focus on fatigue management, developing a risk assessment that will help identify, quantify and manage fatigue-related risks within operational and corporate activities.

Finally, our wellbeing programmes continued to have positive impacts on health participation behaviours, for example encouraging employees to visit a doctor for skin cancer and blood pressure screening. They have also helped identify cases where individuals are at high risk, prompting them to seek urgent medical advice on potentially life-threatening conditions.
At the Oyu Tolgoi mine in Mongolia, clinical data revealed a number of health concerns among employees: increasing weight, hypertension, elevated blood glucose levels, cardiovascular issues and a generally unhealthy population.

In response, throughout 2013 and 2014, the facility implemented a health and wellbeing programme to provide employees and contractors with opportunities to improve their health. It focused on three areas: health and wellbeing information, nutritional support and personalised fitness programmes.

Three departments worked together to put the programme in place: the health, safety and environment (HSE) team, International SOS (the facility’s clinic and occupational health provider), and Catering International Services, which manages catering and nutrition and supports the recreational centre.

Initiatives included:

– Coordinating health improvement programmes with food services and seasonal wellness campaigns.
– Reducing oil and salt in kitchen meals and introducing a colour-coded labelling system (green, amber, red) that provided information on nutritional values.
– The Health passport wellness campaign, a three-step process reviewed every month for four months:
  1. Medical assessment with result entered into a health “passport”, and any risks explained.
  2. Optional referral to a nutritionist.
  3. Access to personal trainers helping with weight modification goals.

Over 1,300 people from a population of 2,800 participated in the first round of the passport launch, which has greatly increased knowledge of health issues at Oyu Tolgoi. Many individuals with hypertension and diabetes were identified and provided with help. Health topics now share the spotlight in the monthly HSE themes, and healthy meal choices have become a clear staple on site.

Oyu Tolgoi’s HSE, health and catering departments jointly devised a programme to help employees improve their health and wellbeing.

For more case studies:
riotinto.com/sd2014/case-studies