SAFETY

We commit to safety and health as a way of life.

Global Safety Results

At Peabody, safety is our first value and a leading measure of operational excellence. Our vision is to operate safe and healthy workplaces that are incident free. Every employee commits to this vision and is accountable for what we call “Safety a Way of Life,” a culture of safety we embrace at work and away, and one that requires constant care and vigilance.

Peabody actively involves employees in developing approaches to prevent incidents and to improve record keeping, reporting and incident investigations, and we emphasize strong communication and continuous improvement of our safety practices.

Global Safety Record

In 2016, Peabody set a new company global safety record, with zero fatalities along with a 1.22\(^1\) total reportable injury frequency rate per 200,000 hours worked. This represents a 2 percent improvement on injury rates from 2015, a year that also set a record for the company.

Overall, Peabody’s injury rates compare favorably with industry averages in both the U.S. and Australia, where our operations achieved incidence rates of 1.14 and 1.43, respectively. Worldwide, Peabody’s surface mines realized an incidence rate of 0.81, a 19 percent improvement over the 2015 rate of 1.00, with the U.S. El Segundo Mine leading the company’s global safety performance with zero reportable injuries or occupational illnesses. Peabody’s underground mines achieved an incidence rate of 2.50 in 2016.

Since 2012, Peabody’s global reportable injury frequency rate has improved 35 percent.

Global Safety Approach

Peabody believes all of its employees must be empowered with the resources, skills and authority to perform their jobs safely.

Every meeting across the company – from the corporate office to the mines – begins with a “safety contact,” a lesson learned by an employee regarding safety or health. Safety interactions, internal reviews and external audits are required at all locations, and evaluations of employee performance and compensation are aligned with safety results across all of Peabody’s sites.

At Peabody, we engage with employees to prevent incidents, a culture that is underpinned by our Safety a Way of Life management system that aligns to the National Mining Association’s (NMA) CORESafety\(^\circ\) framework.

\(^1\)Peabody 2016 safety data. Peabody calculates incidence rates to include hours worked for employees, contractors, temporary workers, vendors, corporate and regional offices.
Safety a Way of Life focuses on higher risk activities combined with promoting a culture of employee participation and accountability through elements like behavior observations, near hit reporting and safety innovation, and is designed to set clear and consistent expectations for safety and health across our global platform.

**In 2016, Peabody was recognized by NMA as the first company in the industry to achieve independent certification under the CORESafety® system.**

CORESafety certification was achieved following an independent audit of Peabody’s safety and health system and implementation across the company’s global platform. The accomplishment was heralded by NMA President and Chief Executive Officer Hal Quinn, who noted, “The company not only embraced an approach to drive continuous performance improvement that went above and beyond what is required of it by regulations, but it analyzed where it could do better, developed a plan, recorded metrics and submitted the results to a third-party auditor.”

Peabody was a leading voice in developing the CORESafety program with NMA, and our integrated Safety and Health management system aligns with the 20 elements of CORESafety based on pillars of leadership, management and assurance.

Peabody also partners with our contractors to ensure a safe, healthy and productive work environment. The governing standards of our Safety and Health management system make certain that services provided to Peabody comply with our requirements and do not expose contractors to unacceptable risk. We utilize contractor qualification and management tools to ensure that each contractor’s safety statistics meet our required expectations and that every contractor on any of our sites is properly trained for the work they will be performing.

Please refer to the Appendix for the full Safety a Way of Life Framework.

**U.S. Reportable Injury Frequency Rate: Peabody Compared to Other Industries**

Reportable Injury Frequency Rate per 200,000 Hours Worked

Working at Peabody is safer than most U.S. industries, based on reportable injury frequency rates. Our global incidence rate is better than the coal industry average and nearly every major industry sector.

Sources: Peabody safety data, 2016. U.S. Department of Labor, Occupational Safety and Health Administration, 2015 data.
Safety in the Americas

Peabody’s Americas operations achieved a total recordable injury frequency rate of 1.14 in 2016, roughly three times better than the U.S. coal mining average. The company’s El Segundo Mine set the pace, operating without a reportable incident throughout 2016. Each Americas operation has a Mine Safety and Health Team comprised of both management and hourly employees who represent multiple shifts and work crews. These teams routinely review mine incidents and reportable injuries and are tasked with evaluating actions and near hits, helping develop preventive measures, communicating findings to the workforce and ensuring best practices are applied.

Several of Peabody’s operations were recognized in 2016 for distinguished safety results. El Segundo Mine was honored by the New Mexico Bureau of Mine Safety and the New Mexico Mining Association as the 2016 Safe Operator of the Year, and its employee Roy Jones was given the Rescue Response Award for being first on the scene to render aid at a non-mining accident involving a vehicle rollover.

Our Gateway North and Cottage Grove operations were honored by the Illinois Department of Natural Resources as the safest underground and surface mines in the state, respectively, while the Gateway North Preparation Plant was named the state’s safest surface facility. Gateway North employees worked more than 319,000 hours from July 2015 to June 2016 and had no reportable injuries for six consecutive months during that time. Cottage Grove employees worked over 187,000 hours during the period. The mine had no reportable incidents from July 2011 to October 2016.

Building a Culture that Cares for People

According to Peabody’s Vice President of Global Health and Safety, Matt Pedersen-Howard, “Safety is the first thing we focus on; it’s the first thing we talk about at each and every meeting,” says Glenn. “One of the cultural aspects we have is that everyone has the ability to speak up about safety. Everyone is empowered within our organization to stop the task if they don’t believe the task is safe. By investing in our people, processes and equipment, we have changed the way in which we work, which is an important step on our journey of continuous safety improvement.”

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Learn more about Peabody’s focus on safety and health in our People section.

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2Peabody 2016 safety data; U.S. Department of Labor, Occupational Safety and Health Administration, 2015 data.
Peabody issues company awards that recognize our operations for their commitment to safety excellence. In 2016, El Segundo Mine won the U.S. platform President’s Award for Best Surface Mine Safety Performance and also won Peabody’s CEO Award, which recognizes the operating site(s) that achieve zero reportable incidents throughout a calendar year. El Segundo also had the most improved safety performance over the prior year. Gateway Mine achieved a total reportable injury frequency rate of 1.81, earning the U.S. platform President’s Award for Best Underground Mine Safety Performance.

**Safety in Australia**

Peabody’s Australian business unit reported an overall 2016 reportable injury frequency rate of 1.43, a slight increase from the prior year, with 2.10 and 1.32 incidence rates for underground and surface mines, respectively. The incidence rates remain among the lowest in the New South Wales and Queensland coal mining industries. Coppabella, Moorvale and Wambo underground mines all improved their safety performance with 12 fewer injuries collectively than the previous year.

Throughout 2016, the Australian Safety Leadership Team ensured a focus on safety was upheld as a core value. Quarterly safety themes introduced discussion around fire protection and properly managing equipment fires, dust control, emergency preparedness and vehicle safety. An annual safety theme highlighted isolation of harmful energy, including electricity and other forms of energy like hydraulic and pneumatic pressure and gravitational energy. Australia enlisted a cross-site improvement team to develop a standardized “Procedure for Isolation and Control of Harmful Energy,” which provides the mine sites with a system to achieve compliance in this area. The procedure offers detail on distinguishing the type of isolation that should be used for various types of workgroups and activities and instructions on how to complete it.

The company collaborates with industry groups in Australia to drive safety initiatives. Peabody provided one of the keynote speakers at the Queensland Annual Mining Safety and Health Conference and was an industry representative on the task force reviewing the re-emergence of pneumoconiosis in Queensland, assisting in the formation of recommendations to the government to address the issue.

Peabody’s Underground Collision Avoidance Project continues to move forward. Our company was fundamental in establishing an Industry Working Group to secure Australian Coal Association Research Program (ACARP) funding to functionally test underground collision avoidance systems against a series of practical working scenarios in the underground coal mining environment. The ACARP testing commenced in late 2016 and is expected to be complete with a report delivered to industry mid-2017. This report will guide Peabody’s selection of an appropriate system for a planned full working trial at one of our Australian underground coal mining operations in 2017 to 2018.

Our Australian operations were honored through company awards for their commitment to safety excellence in 2016. Moorvale Mine achieved the Australian platform President’s Award for Best Surface Mine Safety Performance, with a total reportable injury frequency rate of 0.53. Wambo Mine in New South Wales delivered a total reportable injury frequency rate of 1.62, earning the Australian platform President’s Award for Best Underground Mine Safety Performance.
SAFETY

Safety Improvement Program Shows Results

SafeStart® behavioral change training, which focuses on reduction in human error through the use of critical error reduction techniques, has been completed at all of Peabody’s Australian mine sites. During the next phase, the SafeStart program will be fully integrated into normal work processes. This initiative is driven by Peabody’s executive leaders and guided by a sustainability and leadership plan. The plan affirms strong safety leadership to influence safety behavior; incorporates SafeStart concepts into the safety interactions process to ensure management and supervisors continue to engage with workers regarding safety; embeds SafeStart concepts into existing processes such as incident investigations, the Peabody Leadership Program and pre-start meetings; and focuses on employee identification of poor safety habits and subsequent use of SafeStart techniques to improve safety.

At Peabody’s Moorvale Mine in Queensland, effectively integrating SafeStart concepts into the normal business process has helped to reduce injuries. For instance, at the start of each shift, a worker shares a SafeStart story and then selects a colleague to share an example at the start of the next shift, provoking topic consideration for 24 hours. The mine’s ability to execute on these ideas has resulted in Peabody leadership adopting many of Moorvale’s initiatives to improve the program at other mine sites.

A positive reflection of the impact the SafeStart program is having at our operations is also evidenced through the Red Mountain Joint Venture, a joint venture operation between BHP Billiton Mitsubishi Alliance, BHP Mitsui Alliance and Peabody, which has committed to implementing SafeStart in 2017.

![Moorvale Mine implemented SafeStart in January 2015 and subsequently saw its total reportable injury frequency rate (TRIFR) drop from 6.11 to 0.00 throughout the first half of 2016.](image)

Compliance and Regulation

Peabody collaborates with the Mine Safety and Health Administration (MSHA) and other government agencies to identify and test emerging safety technologies. Peabody’s engineering, maintenance and purchasing teams also partner with other companies, equipment suppliers and governmental agencies to pursue new technologies that have the potential to improve safety, operating performance and mining capabilities.

Before MSHA started to promulgate a rule on mobile proximity detection systems, Peabody was already working to optimize the proximity detection systems on mobile face equipment, an undertaking that is complicated by electromagnetic interference from the mine environment. In partnership with the National Institute for Occupational Safety and Health (NIOSH) and vendors Matrix and Joy, Peabody is currently working to make headway in this area ahead of proposed regulations, and testing has occurred at all four of the company’s U.S. underground mines.

In the U.S., Peabody incurred 2,767 MSHA inspection days across our mines, preparation plants and former active mining sites. The violation rate per day of inspection was 0.48 in 2016 compared to 0.55 the prior year, representing a 13 percent improvement.
Mine safety reporting is included in financial regulatory reports as specified by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), and Peabody complies with Securities and Exchange Commission (SEC) disclosures.

**A Continual Commitment to Improve Safety**

Peabody continually works to improve safety through the testing of processes and technology to create a safer work environment. The hazards of operating machinery, particularly large pieces of moving equipment in repetitive patterns while in any condition other than complete alertness, are well known. Peabody has been seeking to dramatically reduce any potential harm to our employees who operate machinery through several approaches, including testing technology solutions that monitor vehicle operator alertness and provide timely multi-tiered alerts; implementing ergonomic modifications that allow for changes to monotonous routines; providing auditory and mental stimulation and rest breaks; educating employees regarding maximizing rest “off the job,” particularly for those who must sleep during the day; and increasing management awareness.

In partnership with Peabody’s Information Technology team, a timekeeping report has been developed to alert managers when an employee falls outside the company standard for working consecutive hours or days, or when an employee is not afforded sufficient rest opportunities between shifts. The report will enable the investigation of individual occurrences and prevent re-occurrence, and ultimately help the company in its continued endeavors to improve fatigue monitoring.

**Emergency Preparedness**

To prepare for emergency scenarios, Peabody Incident Management and Crisis Management Plans are regularly reviewed, updated and aligned.

Peabody’s mine rescue and first response teams use highly specialized training to assist in the event of emergencies, even those beyond mine boundaries. The teams regularly earn top honors in regional, national and international competitions, which afford the important opportunity to simulate critical rescue missions.

Peabody’s Emergency Response Teams performed well in 2016. In the Illinois Mine Rescue Association competition, Peabody’s Francisco Mine Rescue Team from Indiana placed second, and Gateway North’s Craig Hawkins took second in the individual competition’s Bench Event, where miners ensure proper functioning of a breathing apparatus under a timed response. The Francisco team went on to place third in the Nationwide Mine Rescue Skills Championship.

The Metropolitan Underground Team from New South Wales participated in the 57th Annual Southern Mines Rescue competition and tied for first place in the Firefighting Scenario, with the mine’s Martin Jackson winning Best Individual First Aid Rescuer.

The Wambo Underground Mine Rescue Team, also from New South Wales, placed first in First Aid and sixth overall during the International Mines Rescue Competition.

*The Wambo Mine Rescue Team is pictured with Canadian Prime Minister Justin Trudeau at the International Mines Rescue Competition, where the team placed first in First Aid.*
A Competitive Spirit of Safety Leadership

Mining competitions serve as a platform for Peabody to advance best practices in safety around the world, benefiting our people, our company and the industry. Our employees take great pride in the global safety leadership we demonstrate at these competitions.

The Wambo Underground Mine Rescue Team (MRT) has nine consecutive years of success at the national or international levels. In 2015, they took first place in the highly contested 53rd Annual Australian Underground Mines Rescue competition, earning the honor of representing the country in the 2016 International Mines Rescue Competition held in Sudbury, Canada, where they achieved first place in First Aid and sixth overall, competing against nearly 30 teams from 13 nations.

During four days of events, the competition presented lifelike emergency response situations such as firefighting, high angle rope rescue and underground mine rescue simulation. The Wambo MRT honed their skills throughout the year, often on personal time, and shared training techniques with Peabody’s Twentymile MRT in Colorado while en route to the competition. The team is comprised of eight members, all of whom began their careers in mine rescue while working at Wambo, with one member marking 23 years in the field.

The Wambo Mine Rescue Team is pictured competing during the International Mines Rescue Competition. These events provide simulated emergency scenarios and test first aid, search and recovery, firefighting, roof support and ventilation skills.

Safety Achievements

Through safety and health innovation awards, Peabody encourages and honors employees and contractors who collaborate, innovate and execute risk reduction ideas that make the company safer and stronger.

Twenty-seven entries across Peabody’s global operations were submitted during 2016, presenting an array of solutions. The following took top honors.

- **First Place and Most Transferable** – Wilpinjong Mine’s 789D dump body stand and access platform helps create a safe and level platform for maintenance in and access to the haul truck bed.

- **Second Place** – Twentymile Mine’s multi-stage pump longwall ventilation moves harmful mine gases from behind the advancing longwall through a borehole, piping them directly to the surface and eliminating the risk of employees traveling into an area with low oxygen or high methane, carbon monoxide and carbon dioxide, and reducing spontaneous combustion risks.
• **Third Place and Most Original** – North Antelope Rochelle Mine’s shovel tow hook allows a large piece of pulling apparatus to be split into several laminate layers and bolted together, reducing the weight for each manual lift and making it easier for an individual to attach the tow hook to a car body, minimizing the likelihood of an injury.

• **Most Effective Safety Solution** – With university and industry partners, Wilpinjong Mine implemented a remote control dozer and semi-autonomous dozing system in a pivot push dozer, designed to mitigate exposure to unhealthy levels of whole body vibration and noise and reduce dozer-related injuries.

• **Most Cost-Effective Safety Solution** – A hoist cylinder trunnion extension was created by the Coppabella Moorvale Mine to significantly reduce the time and risk associated with monitoring for cracking and failure of hoist cylinder trunnions.

Find extensive detail about each pioneering innovation in our *Excellence* section.

*El Segundo Mine in New Mexico, which has operated without a reportable incident for 21 months as of May 2017, was recognized in 2016 for distinguished safety results. Honors included the company’s award for “Best Surface Mine Safety Performance” and recognition by the New Mexico Bureau of Mine Safety and the New Mexico Mining Association as the 2016 Safe Operator of the Year.*