Preventing incidents
We aspire to no accidents, no harm to people and no damage to the environment. To deliver this, we carefully plan our operations, identifying potential hazards and managing risks at every stage.

We design our facilities to appropriate industry standards and manage them throughout their lifetime.

Human performance in safety
People, and how they interact with equipment, processes and each other, are fundamental to a safe working environment. We have introduced techniques for teams to analyse and redesign tasks to reduce the chance of mistakes occurring. An example of this is when the team working in the control room at our Tropical biofuels mill in Brazil redesigned the way data is presented to make it easier for them to monitor operations.

Understanding how to support human performance is crucial in helping to reduce risk. We are therefore helping leaders and the workforce to understand what factors might contribute to mistakes happening by building their knowledge and skills.

More than 900 people have completed the first round of human performance training since it began in late 2017.

Oil spill preparedness
We work tirelessly to make our operations safe and reliable, and part of that is being alert to risks of an oil spill.

400+
employees have taken part in our UN IMO accredited oil spill response course to date

Our approach
Key issues for our industry:
• preventing accidents and incidents
• monitoring security
• keeping people safe.

We focus on all of these so people can go home safely.

A learning organization
Our operating management system is designed to help us manage risks and continuously improve the way we work. It enables us to analyse our performance and apply lessons learned from incidents, near misses and audit findings. By building a picture of our risks, we are able to concentrate our safety efforts. And, we’ve invested in new data tracking systems which allow us to share safety information across the company.

Visit bp.com/operatingbusinesses for more information on our operating management system.
 risks, we conduct quality, technical, health, safety and security audits before awarding contracts. Once they start work, we continue to monitor their safety performance.

Training together
Through simulation exercises we help prepare both staff and contractors in the unlikely event of real-life safety incidents. Working with Maersk Training, our drilling teams tackle scenarios based on wells that crews are drilling or preparing to drill. The simulator replicates a series of abnormal situations – such as a fire, a person overboard or a helicopter crash on the flight deck.

This industry leading training builds the crews’ technical skills, reinforces the importance of clear communication and procedures, and emphasizes non-technical skills to identify and manage risks related to human error.

Visit bp.com/maersktraining

Managing contractor safety
More than half of the hours worked by BP are carried out by contractors. So, their skills and performance are vital to our ability to carry out our work safely and responsibly.

Our standard model contracts include health, safety and security requirements. Through bridging documents, we define how our safety management system co-exists with those of our contractors to manage risk on a site. And for our contractors facing the most serious

Improving safety with technology
Digitalization and visualization technologies are proving increasingly useful in making the world safer and more efficient.

At BP, our wells data platform ARGUS holds historical and real-time data on nearly all of the 2,500 wells that we operate globally, giving our engineers the ability to access and analyse alerts quickly and remotely. This enables early identification and rapid response should an issue arise.

Automation is changing the way we access and monitor our operations in difficult to reach areas. For example, we are testing an autonomous pipeline survey system along our Clair field pipeline in the UK North Sea. Unmanned vessels use artificial intelligence to inspect the pipeline, gather data and provide almost instant alerts if they detect anything unusual.

We are also using technologies to strengthen our response to oil spills. Working with Oil Spill Response Limited, an industry-funded co-operative, and others, we used satellites, drones and autonomous underwater vehicles in an oil spill response exercise. This enabled us to study an oil plume from a small controlled release and the effectiveness of dispersant in helping it to biodegrade.
Keeping people safe
We focus on keeping employees and contractors safe and alert to potential hazards that could occur in their work.

Nothing matters more than every one of our people returning home safely each day. Tragically, we suffered one fatality in 2017, when a firefighter died in the course of his duties at our biofuels business in Brazil. We deeply regret this loss and continue to work towards eliminating injuries and fatalities in our work.

Everyone working at BP has the authority to stop unsafe work. Our leaders are accountable for helping to build this culture of care in their teams and every employee is responsible for keeping themselves and each other safe.

We work with our peers to create industry-wide standards. For example, dropped objects are one of the most common hazards in the oil and gas industry. This is because a lot of our work is done at height and uses heavy equipment. Within industry group IPIECA, we have developed a global performance standard to help us monitor and improve prevention programmes, investigate incidents and implement corrective actions from lessons learned.

Health and wellbeing
We are committed to managing health hazards that could cause harm to our workforce or the communities where we operate. For some of our more significant hazards – such as benzene or noise – we monitor exposure levels and use that information to put appropriate measures in place. For example, we monitor machine noise at our facilities in Alaska, and invest in equipment that controls it at the source, as well as providing enhanced protective gear, where needed. This is helping to prevent damage to hearing.

We provide teams with training which explains how stress and psychological ill health during times of change might affect them. This training also covers resilience skills, which enable employees to manage their stress more effectively. We also try to prevent fatigue. Typically caused by long working hours, fatigue is known to significantly impair an individual’s judgment, reactions and decision-making abilities. For example, in the Upstream – where shift working, rotational work and extended working hours can be common – we have designated personnel responsible for checking working hours and patterns and allocating adequate rest and sleep periods.

Security
As a global business, BP monitors for hostile actions that could harm our people or disrupt our operations. We particularly look at operating areas affected by political and social unrest, terrorism, armed conflict or criminal activity.

Our 24-hour response information centre keeps watch over global events and related developments, providing real-time information and accounting for staff’s whereabouts. This meant that in March 2017 we were aware of the terrorist attack in London’s Westminster almost immediately. Within minutes we knew which employees had scheduled meetings or travel plans in the surrounding area, so we were able to confirm their safety and provide advice.

Cyber threats
Cyber attacks are on the rise and our industry is subject to evolving risks from hacktivists, cyber criminals, terrorists and insiders. We have experienced threats to the security of our digital infrastructure, but none of these had a significant effect on our business in 2017.

We use a range of measures to manage this risk, including the use of cyber security policies and procedures, security protection tools, ongoing detection and monitoring of threats, and testing of response and recovery procedures. We collaborate closely with governments, law enforcement and industry peers to understand and respond to new and emerging threats.

To encourage vigilance among our employees, our cyber security programme covers topics such as email phishing and the correct classification and handling of our information.

"We have a strong speak-up culture. It is the catalyst that inspires people to take ownership, not only for their personal safety, but also for the safety of others."

Joel Johnson
Safety committee chair, BP’s Cherry Point refinery
Keeping our people safe during Hurricane Harvey

Houston, Texas, is home to BP’s US headquarters. With around 4,300 people, it is also our largest employee base in the world. In 2017, Hurricane Harvey dumped historic levels of rainfall on the city with flooding damaging hundreds of our employees’ homes and several of our office buildings.

Our immediate priority was the safety of our employees and their families. BP’s storm response teams, comprising hundreds of company volunteers, supported rescue and recovery efforts in the area. Our employees pitched in to assist their colleagues. Efforts included serving hot meals at shelters, answering phones at emergency call centres, rescuing stranded families by boat and opening their homes to evacuees. BP also helped employees clean up and dry out their homes.

Our headquarters were severely flooded, but our contingency plans for natural disasters meant that we were able to keep our businesses running. For example, before the hurricane hit, we moved around 200 of our traders and their families to our back-up trading site in Dallas.

During this difficult time, employees rallied together to support each other and the company.

When Harvey struck land, none of us could have predicted the road ahead. In the face of extraordinary conditions, the BP family has been – quite simply – extraordinary. I couldn’t be prouder to work with this team.

As we’re witnessing, natural disasters can bring tremendous physical destruction, but they also can bring out the best in people.

John Mingé
Chairman and president, BP America

650+ employees affected by flood damage

800+ employees reached out to the storm assistance team
Our safety performance

We track our safety performance using industry metrics and work to continuously improve personal and process safety across BP.

In 2017 we continued to see a reduction in the overall number of process safety events, despite a slight increase in tier 1, the more serious events. We also saw a small increase in our recordable injury frequency and day away from work case frequency.

Improving safety in our operations is a high priority and we are working on it right across the business.

We investigate safety incidents and near misses to identify any potential underlying themes and we use leading indicators, like inspections and equipment tests, to monitor the strength of controls to prevent incidents. What we learn from performance insights helps us focus our safety efforts. For example, we are implementing actions to support the performance and reliability of our people, with the express aim of reducing the chances of mistakes occurring.

Proactively managing equipment corrosion is also a focus for us and we believe this is helping to deliver improvements in process safety in our upstream and downstream businesses.

Staying safe on the move

Vehicle accidents are one of our industry’s biggest risks, so we focus on improving driving skills and road safety awareness.

We provide drivers with guidance on road safety, including advice on what constitutes a fit-for-purpose vehicle. We tailor our driving safety programmes to take account of local risks and conditions, such as driving culture, road quality or extreme weather. In some more hazardous locations, we use GPS tracking and cameras to monitor driving behaviour.

For example, in Europe we have more than 650 trucks travelling millions of kilometres every year to distribute our fuels. So it’s important that we help drivers to make every journey as safe as possible. We provide support and guidance on reporting near misses, journey risk management and behaviour-based driving practices. Results are promising, and, in 2017, our 1,700 fuel drivers in Europe reached 12 consecutive months without a single severe vehicle accident.

There were 547 reported vehicle accidents in 2017. This is the third consecutive year in which we have recorded no driving-related workforce fatalities and the 10th consecutive year in the Upstream segment. We believe this reflects the positive impacts of a sustained effort to improve driving safety, working with employees, contractors and communities.

Aviation safety

As we use a variety of aircraft in our operations – sometimes in challenging offshore or remote areas – we have safety requirements in place for employees and contractors travelling by air. These cover the approval of aviation operators, contracting for aviation services and the safe management of any aircraft operated on behalf of BP.

Rail and shipping

We transport some of our products in insulated railcars fitted with a protective shell to protect from fire and defend against puncturing and resulting spills or releases. BP-operated and chartered tankers also move significant volumes of products around the world – these are all subject to BP-approved health, safety, security and environmental requirements. Our operated and chartered international fleet of ships are all double-hulled to help avoid major spills.

Visit bp.com/hsechartingtool for safety data.