



Safety

Safety is the foundation of everything BP does, every day.

BP's goals are clear: **no accidents, no harm to people and no damage to the environment**. That's a huge responsibility — one the company does not take for granted.

A safer BP

From 2005 to 2010, BP had serious incidents in its refining, pipeline and offshore operations — in Texas City, Alaska and the Gulf of Mexico, respectively. Each had different causes, and each taught BP important safety lessons.

In the years since, BP has transformed itself by introducing new training programs, deploying innovative technologies and strengthening its safety culture. As a result, the people who work for BP today are more equipped to operate safely and better prepared for any situation.

From 2010 through 2018, BP's most important safety metrics showed significant improvement. For instance, the company's total number of Tier 1 process safety events — the most consequential events involving an unplanned or uncontrolled release of materials — fell by roughly **75 percent** across the globe.

BP has made progress, and it remains focused on continuous improvement. Complacency undermines safety, which is why BP is working every day to become even better, even safer.

How BP works

BP starts with its core values, including **safety, respect, excellence, courage and one team**. These values define BP, and its people strive to demonstrate them in all aspects of their work.

BP has company-wide guidelines for how to operate, which it calls its **Operating Management System (OMS)**, and it organizes people according to their functional responsibilities. Each function develops its own rules and requirements that are consistent with BP's broader OMS guidelines.

In the company's Global Wells Organization, for example, drillers around the world meet specific requirements in their training, contractor management and well operations. This helps drillers everywhere operate in a similar manner.

All BP teams can ask the company's **Safety and Operational Risk (S&OR)** team any questions they have about how to safely do their jobs. While front line workers are most responsible for safe and reliable operations, the S&OR team offers an additional and valuable layer of assistance and expertise.

Taken all together, BP's values, OMS, functional organizations and the S&OR team provide the framework and the support to operate safely.

How BP trains

BP's worker training combines rigorous standards, world-class instruction and sophisticated tools to prevent incidents and injuries.

This training includes both **classroom instruction and hands-on simulation**. BP replicates scenarios its teams are likely to encounter, as well as potential challenges that, though unlikely, BP expects people to be ready to handle.

For example, through BP's partnership with Maersk Training, employees and contractors train on lifelike,



state-of-the-art simulators that can replicate nearly every critical job on an offshore drilling rig. This enables offshore teams to practice scenarios relevant to specific wells and to prepare for a wide range of contingencies.

BP also uses simulators to train refinery and chemical plant workers. These systems allow people to practice different tasks — such as unit startup and shutdown, and pump and valve operations — under both normal and abnormal conditions.

How BP responds

While BP instructs, trains and practices to prevent incidents, it also prepares its teams to respond in the unlikely event that one were to occur. This way, BP is prepared to act quickly to minimize the impact of an incident and **protect people and the environment**.

BP's response plans and preparation incorporate what it has learned over many years of operation, including from

the 2010 Deepwater Horizon incident. For example, BP has **global standards and experts** to help prepare and equip teams in deepwater regions to respond to an oil spill, and it has shared research and best practices with governments, partners and competitors.

Even as BP has prepared to respond to an incident, it also has worked hard to prevent such a response from being needed. Among its many initiatives, BP continues to work with industry members to improve standards on the safety and reliability of subsea blowout preventers and other critical equipment.

Technology

Once people are trained and on the job, BP uses leading-edge technologies to help its teams predict where safety challenges might arise so that they can intervene and **prevent incidents from occurring**.

For example:

- BP's **Remote Collaboration Center** offers round-the-clock support for deepwater well operations in the Gulf of Mexico, providing offshore personnel with 24/7 assistance from onshore experts.
- BP has deployed a suite of intuitive computer consoles — known as **BP Well Advisor** — that use sensory technology to gather data about the company's well operations and then translate it into simple, real-time indicators that help rig crews and office-based experts enhance safety and performance.
- BP uses a fleet of **drones and robotic crawlers** to safely and thoroughly inspect its offshore facilities in the Gulf of Mexico, reducing the need for people to do the job harnessed to ropes.
- At its Cherry Point Refinery, BP employs **phased array ultrasonic testing**, which uses soundwaves to check the structural integrity of equipment and piping.

Culture

BP workers provide the ultimate safety net. Anyone, anywhere, can and should stop any job for any reason if they think it is unsafe. This is the most important responsibility workers have.

To have a strong safety culture, BP has to promote a **strong speak-up culture** — in which employees and contractors alike are encouraged to raise questions or concerns. BP supervisors know they must be accessible to their team members so that everyone feels comfortable speaking up.

Commitment to safety

BP is committed to the safety of its people and the communities where it operates. This requires constant vigilance and dedication.

That's why BP is working every day to improve its **training, technology and culture**.