

## 3. People and Planet

# Health and Safety

Our science enables a cleaner and healthier world. At the same time, we are committed to the health and safety of everyone involved in bringing our science to life.

## Health and Safety – Performance

	2017	2016	% change
Lost time injury and illness rate (LTIR)	<b>0.49</b>	0.37	+32
Total recordable injury and illness rate (TRIIR)	<b>1.05</b>	0.85	+24
Incidents of occupational illness cases per 1,000 employees	<b>1.00</b>	0.90	+11

**Introduction**

Our vision is for a cleaner and healthier world and we make health and safety our priority. We use our scientific know-how to improve health, safety and wellbeing. It is applied by our customers in products that are used to relieve pain, restore hearing and alleviate the symptoms of a variety of medical conditions. At the same time, we strive to safeguard the safety and wellbeing of our staff and those who come into contact with our products.

Health and safety is one of Johnson Matthey's core values and we have been working hard to embed it in our culture. We have adopted a safety culture maturity model (below) to guide our progress and employees are required to follow five clear and simple safety principles. In addition, with a health and safety element now a requirement of all employees' performance reviews, we have taken further steps to ensure it remains firmly on everyone's radar.

The group has made good progress over the past few years. However, recently the trend of improved performance has reversed and we must do better. We are committed to this and over the last year new measures, such as an improved incident reporting system and a new behavioural training scheme, have been put in place to help us regain momentum.

**Our Commitment to Health and Safety**

Our focus on health and safety is underpinned by five principles:

1. All injuries and occupational illnesses are preventable.
2. We are all responsible for preventing injuries and occupational illness.
3. Adherence to lifesaving policies and site safety rules is mandatory.

4. Working safely is a condition of employment.
5. We will promote off the job health and safety for our employees.

The maturity model that we have adopted helps map our course towards further improvements in embedding health and safety. We reviewed our performance this year and believe that we have remained at level three, 'involving', which is about making sure all of our people are engaged. We know that culture does not change overnight and a one size fits all approach to health and safety won't get the positive results we require, so progressing along the maturity model demands commitment and rigour.

To move to level four we need to make sure that everyone at Johnson Matthey reaches a high level of engagement with health and safety. This starts with our managers and team leaders who need to inspire their teams and lead by example. We are bringing this to life for them through a new training programme, 'My Team, My Responsibility'. This is reinforced by the delivery of site specific improvement plans for each of our sites, 70 of which were developed last year. These plans identify specific areas of action for example, improving communications, tightening up our processes and training leaders in how to make safety a priority.

27 of our sites are compliant with BS OHSAS 18001, the internationally recognised British Standard that sets out requirements for occupational health and safety management good practice.

All of our manufacturing sites have formal health and safety committees to help monitor, collect feedback and advise on occupational safety programmes.

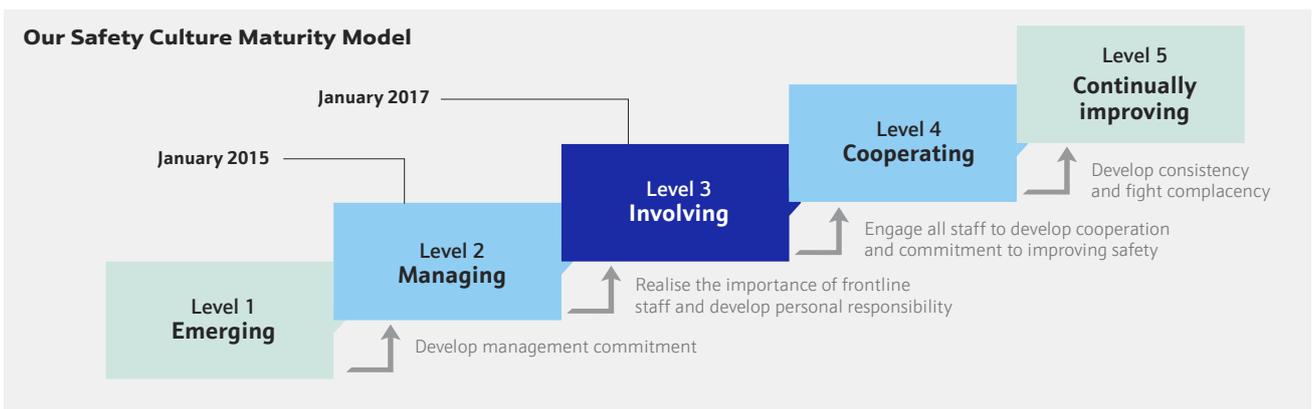
They are led by site senior management and meet on a regular basis to cascade plans and ideas to and from our workforce. Over half of our manufacturing sites have a formal joint worker-management health and safety committee comprised of representatives from both staff level and management grades, covering 67% of employees globally.

**Safety Performance**

Our performance is summarised in the table on page 60 and the charts on page 65. Our LTIIR rate increased by 32% during the year, from 0.37 in 2015/16 to 0.49 in 2016/17. Over the same period, our TRIR also increased from 0.85 to 1.05, an increase of 24%. There were a total of 60 lost time accidents and illnesses across the group during 2016/17. There were no employee fatalities in the year; the last employee fatality at Johnson Matthey occurred in July 2015.

We have focused on behaviours with the launch of the Environment, Health and Safety (EHS) Behaviour Standard and there was a reduction in the number of incidents related to people failing to follow procedures. The standard has also empowered people to speak up about incidents and say when they are related to workplace design. Remedial action plans are then set up to tackle the issues.

Most of the increases in incidents are found among those where a lack of situational awareness is a key root cause, with workers failing to maintain their attention when in the workplace. One of the modules of the new My Team, My Responsibility programme aims to encourage a mindset of heightened awareness of the hazards in the workplace.



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#### Health Performance

In line with our health and safety principles, we have continued to focus on supporting employees' wellbeing. Our specialist occupational physicians were involved in several projects during the year, including a review of our emergency treatment options for acids. As new treatments became available we wanted to explore how we might use them in our own operations. We provided guidance to managers on stress, which is a significant cause of occupational illness at Johnson Matthey. We also reviewed cases involving chemical exposure so that we can identify the symptoms more easily as these cases are often misdiagnosed.

85% of our facilities around the world conducted an annual sustainable health review and improvement planning process in 2016/17, which was a slight decrease on last year. The top three issues identified were ergonomics, wellness and chemical exposure management.

We use a health scorecard system developed by the UK Chemical Industries Association to rate the level of implementation of preventative programmes against our corporate standards. The scorecard includes 14 key elements that align with our most significant health risks. 88% of sites completed their health scorecard review during the year. We saw a small decrease in the proportion of sites achieving A and B levels of maturity and a corresponding increase in sites reporting C and D grades, mainly due to new sites self-reporting. We expect these grades to improve next year.

Employee occupational illnesses increased slightly from 0.9 cases per 1,000 employees in 2015/16 to 1.0 cases per 1,000 employees in 2016/17. Our overall number of occupational illnesses remains very low and we expect to see some annual fluctuations as these are subject to statistical variation.

#### Contractor Health and Safety

The health and safety of contractors working for Johnson Matthey is as important to us as that of our staff. Our clear and determined efforts to ensure the safety of contractors was reflected in two projects during the year. During the construction of our platinum group metal refinery in China, we had zero lost time accidents over 700,000 man hours. Our newly built factory for assembling battery systems in Poland also achieved health and safety excellence during construction, with zero lost time accidents over 330,000 man hours.

Overall, contractor LTIIR dropped from 0.53 to 0.30. We saw a reduction from 11 lost time incidents during 2015/16 to six during 2016/17. The number of contractor hours worked during 2015/16 and 2016/17 are very similar at around four million hours. There were no contractor fatalities in 2016/17; the last one occurred in October 2010.

We revised our contractor safety policy during the year and launched new guidance to help sites achieve compliance. There have been no other formal changes to our contractor management during 2016/17.

#### My Team, My Responsibility

My Team, My Responsibility training builds on our EHS behaviour awareness programme. It is aligned with our EHS Behaviour Standard, which forms part of our performance review process and sets out expected behaviours around safety standards, communication, risk management and involvement for all levels of staff.

This training builds on work we have already done to encourage employees to take personal responsibility for safety. Team leaders receive training on how to deliver the interactive programme. Back at their local site, team action plans are developed, along with how they will be tracked. These are later submitted to a third party consultancy for audit.

The aim of the programme is to help us identify preventative measures to avoid incidents from happening in the first place. It will also build the skills and confidence of team leaders, remove employee reluctance to speak up and make the right behaviours second nature.

#### Improving Safety with Better Reporting

A robust system for reporting and understanding safety incidents will also help drive improved performance. In April 2017, we replaced our existing system, which did not have sufficient global consistency, with a new system called Enablon.

Enablon has powerful reporting capabilities and formal action management to ensure that corrective action is taken. The system is globally consistent and will enable us to analyse trends, giving clear visibility of incidents and near misses. This will help us identify patterns and proactively target areas of concern before they escalate into accidents. Its analysis functionality also provides a root cause analysis of incidents and captures behavioural safety observations.

#### Combating Common Causes of Injury

Slips, trips and falls are also a common cause of injury; 24% of our lost time injuries come from these incidents. We have launched a training video in 11 languages to help employees develop positive behaviours to prevent these injuries occurring. The video is used at team meetings, inductions and awareness events, so that the risks are front of mind among all employees.

#### Process Safety Risk Management

We take our responsibility to safeguard products and processes that are potentially harmful very seriously, beyond simply complying with the law.

One area of special concern for us is process safety risk management (PSRM), which is all about how we safely manage our most hazardous processes. We have implemented our own PSRM policy, developed a process safety audit protocol and audited selected sites. We have worked with the Chemical Industries Association in the UK to develop national training standards for process safety.

New this year was a revision of our PSRM policy and guidance, which are available to employees on our intranet. The policy defines 'applicable processes', i.e. those with high hazards such as flammable gas and toxic liquids. In 2016, we surveyed our sites to find out exactly where our process hazards are located. We found that 30 of our 70 sites operate these applicable processes and we are now better placed to develop a schedule for auditing these sites. To date, we have no specific process safety performance indicators and in the coming year we plan to explore how we might set up common global indicators.

### Regular and Hazardous Work Audits

Following the tragic fatality at one of our US sites in July 2015, we undertook 26 hazardous work audits at our largest manufacturing plants. These raised over 600 improvement actions, ranging from smaller scale improvements to training programmes and, in some cases, complete rethinks of a site's systems. Of the sites that were audited, eight have a combined total of 48 audit actions ongoing, to be completed in the 2017/18 reporting year.

We also have an ongoing programme of regular EHS assurance audits. These are undertaken using global protocols, which have been updated to incorporate the key findings of the hazardous work audits. In 2016/17, we undertook 23 audits at our manufacturing and R&D facilities. Priority was given to sites that were not part of the hazardous work audit programme and had not been subject to a routine audit in the past 18 to 24 months.

### Product Lifecycle Management

Our products make a significant contribution to protecting the planet and the efficient use of its resources. However, the chemicals that go into them need careful management throughout their lifecycle. We take this product stewardship very seriously through our policies and practices on product lifecycle management.

The majority of products that leave our sites are only part way through their lifecycle. They go on to become part of another product or material, which will be used and then disposed of or recycled.

Irrespective of our product's lifecycle stage, the same principles of product stewardship are applied. We are committed to responsible management of the chemicals we use and produce and have well established systems to ensure the sound management throughout their lifecycle. Our approaches are in line with the global framework introduced by the Strategic Approach to International Chemicals Management (SAICM) to promote chemical safety around the world.

By carrying out rigorous evaluations of our new and existing products, assessing any risks associated with product use and determining appropriate risk management measures, we ensure vital information is communicated to end users and others in the supply chain. Our procedures also capture information on component sourcing, when appropriate, and our technical / safety data sheets detail safe use, disposal and substance content information. These procedures are applied to all of our significant product and service categories. We work collaboratively with industry partners and customers, regulators and non-governmental organisations to increase understanding of the lifecycle impacts of our products and to maintain confidence in Johnson Matthey as a responsible company.

Our businesses have management systems to assess the health and safety impact of products across their lifecycle, from product concept and R&D through manufacturing, distribution, the use phase, and finally to end of life or reuse. As such, all significant product and service categories are assessed for improvement in terms of health and safety impacts. To maintain a focus on our products' sustainability, we have recently formed a central committee to monitor substance of concern designation and establish a focused list of substances that are relevant to Johnson Matthey, which an authorised manager will need to approve new uses of within our businesses and technology centres. Johnson Matthey's products are not subject to restrictions in the markets in which they are offered and our regulatory affairs teams are well placed to respond to stakeholder questions related to banned or disputed products.



Read more online, including our policy on animal testing: [www.matthey.com/sustainability](http://www.matthey.com/sustainability)

We use a systematic product responsibility reporting scheme to monitor the performance of our operations and maintain surveillance of the company's products and services.

In 2016/17, there were no notifications of significant end user health effects involving our products. We did not identify any non-compliance with regulations or voluntary codes concerning health and safety impacts of products and services or product and service information, labelling and marketing communications.

Work continued during this year to harmonise the hazard communication documentation across the company. A number of divisions are regionally centralising their hazard communication teams and collaborating more broadly to drive continuous improvement in the quality of information in our safety data sheets and product labelling.

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We continue to contribute to industry wide efforts to develop state of the art guidelines on occupational hazard and safety management information for platinum group metals and their products, via the International Platinum Association's Platinum Group Metals Health Science Research Group (HSRG). During the year, we have been developing a workplace guide that will support the industry in ensuring these critical chemicals and products are responsibly managed.

Phase two of the HSRG-funded epidemiology study on occupational chloroplatinatate exposure paradigms and risk of respiratory sensitisation (allergy and asthma), designed to update the previous study with more recent exposure monitoring data, has recently commenced. Chloroplatinates feature as intermediates in the manufacturing processes for some of our platinum based products. Planning for how our operations will comprehensively meet the voluntary exposure control target for chloroplatinates, which we reported on last year, progressed well during 2016/17.

Regulatory developments around the globe continue apace. We maintain active horizon scanning to ensure our current and future business plans align with the prevailing chemical and product legislative requirements in, for example, South Korea, India and the Eurasian Economic Area.

Preparations to submit the remaining 120 lower tonnage substance registrations before May 2018 under the EU chemical management framework known as REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation) are progressing to plan and we remain on track to meet the regulatory deadline.

Our US sites met their 2016 Chemical Data Reporting obligations under the Toxic Substances Control Act (TSCA). We have reviewed and updated our TSCA reporting and retention programmes to ensure our continued compliance.

We have entered into initial dialogue with certain UK Government departments and the UK Chemical Industries Association, in relation to how chemicals control policies may develop following the UK's decision to leave the European Union.

In 2017/18, Johnson Matthey will join The Council of European Chemical Industry (CEFIC) as a corporate member. This follows recognition that our portfolio of businesses and products has an increased interest in chemistries that CEFIC and its sector groups actively support through leading advocacy within Europe. In addition to coverage related to our water technologies, catalyst and active pharmaceutical ingredient interests, Johnson Matthey will benefit from CEFIC's horizontal programmes on, for example, regulatory horizon scanning and advocacy, sustainability and the circular economy.

#### Priorities for 2017/18

To reverse 2016/17's negative trend in our health and safety performance, in 2017/18 we will review our strategy and develop an updated approach. At the same time, we are improving our reporting methods so we can better review and track leading indicators (such as near misses, safety observations and training coverage) so that we can take preventative action before accidents happen. We will do this through Enablon. Following its launch to EHS representatives across the world, we now need to embed it more widely so that everyone knows when to and how to log events. The system also helps us track the follow up and closure of incidents. This should increase our understanding of risk in different environments and add rigour to our processes, which in turn will improve performance.

In addition, we plan to integrate our PSRM audits into our regular assurance programme of EHS audits and review our overall approach to PSRM. We will also complete the roll out of My Team, My Responsibility training which will help raise awareness of workplace hazards, increase employee engagement and stimulate personal commitment to EHS.

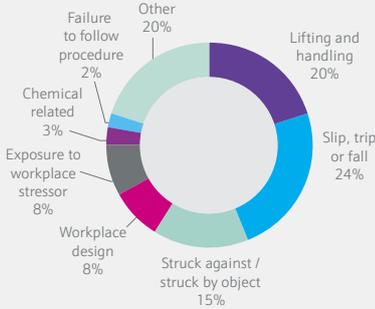
We will continue work to embed and enhance our product stewardship assessments, which will help to refine the process of developing and introducing new products across our markets and geographies. We plan to integrate the framework into business processes through, for example, awareness training, in order to support our focus on sustainable product development.

Following a review of key EHS policies this year, including our eight lifesaving policies, we will be working to embed them more fully in the business in the year ahead.

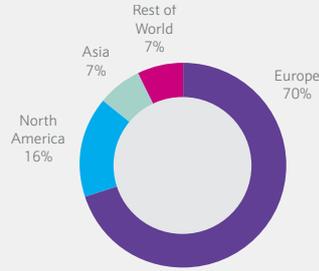
Looking further ahead, our aim is to be in the top 10% of our industry peers and we will benchmark our progress whilst continuing to develop and adapt our long term strategy to realise our aspiration of zero harm.

# Health and Safety – Performance Data

## Lost Time Injuries and Illnesses by Event Type



## Lost Time Injuries and Illnesses by Region

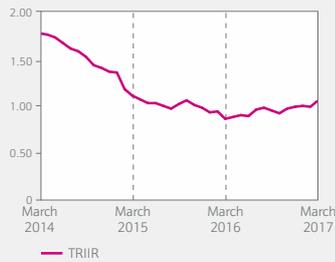


## Occupational Illness Cases



## Lost Time Injury and Illness Rate (LTIIR)

per 200,000 working hours in a rolling year

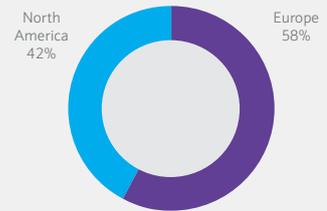


## Total Recordable Injury and Illness Rate (TRIIR)

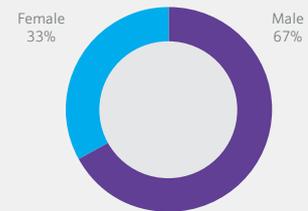
per 200,000 working hours in a rolling year



## Occupational Illnesses by Region



## Occupational Illnesses by Gender



## Trade Union Committee Representation

23 of our manufacturing sites have active trade unions, with 20 of them having a trade union representative on their local health and safety committee and 15 sites have formal trade union agreements that cover health and safety topics (listed in the table below).

### Topics Covered by Trade Union Agreements

Topic	% of sites covered
Use of personal protective equipment	73
Participation of worker representatives in health and safety inspections and investigations	87
Training and education	80
Complaints mechanisms	87
The right to refuse unsafe work	73
Periodic inspections	60