

HSE's Science and Evidence investment plan

High-quality science, evidence and analysis underpin HSE's risk-based, goal-setting regulatory regime and are vital for ensuring effective and proportionate risk management that protects workers and safeguards the public while enabling

productivity, innovation and growth. Our Science and Evidence Strategy 2016-2020, underpinned by our areas of research interest, is at the heart of our science and evidence approach.

Current Position

Our current investment portfolio of work is delivered through six science hubs; these are:

- Regulatory frameworks which are fit for the future;
- Taking responsibility for health at work;
- The right evidence for the future;
- The impact of demographic change on the future workforce;

- The right intervention strategy for the British industrial asset base;
- Lessons learned from investigations.

In each science hub, work is undertaken to ensure that robust science and evidence is provided to inform HSE policy and to support operational activities.



Future Priorities

The top priorities for science and evidence investment will be:

Specialist incident investigation: We will continue to undertake this work to understand the direct and underlying causes of incidents and provide impartial expert evidence for court cases and industrial tribunals.

Applied research: Our areas of research interest will be driven through the science hubs as detailed above, and in HSE's Science and Evidence Delivery Plan. This includes strategic research into major industrial accident hazards, regulatory activities and occupational health and safety (aligned with HSE's Health and Work Strategy and Sector Action Plans). We will continue to identify and grow commercial opportunities, to carry out collaborative research with a wide range of research organisations including institutes, academia and industry through a programme of Shared Research.

Foresight: We will use foresight intelligence and futures exercises on new and emerging challenges for the future world of work to inform policy making and ensure that HSE is keeping pace with change. We will publish an annual Foresight Report to raise awareness within the health and safety system of key emerging challenges and to support our decisions regarding future research priorities.

Support to HSE policy and operations: We will provide a wide range of operational scientific activities within HSE including informing the development of advice and guidance for both inspectors and duty holders; specialist support for the assessment of safety cases by duty holders; analytical support for regulatory impact assessments; and production of HSE's published annual health and statistics.

Capability and capacity: We will develop and maintain our scientific capability and manage capacity to maximise its contribution to delivering HSE's mission. We will continue the rolling programme of capital expenditure on scientific equipment, software and experimental facilities. Our scientific staff development will be aligned with the Government Science and Engineering Profession Strategy.

Engagement: We will engage with stakeholders through involvement in industry events, attendance at national and international conferences, work with the appropriate Government Professions and international networks such as the Partnership for European Research in Occupational Safety and Health (PEROSH) and the International Commission on Occupational Health (ICOH). We will continue to publish an annual Science Review with case studies to demonstrate the quality and impact of our science. We will publish our research findings in peer reviewed scientific journals (by open access where available) and in the HSE Research Reports series; and we will extend our opportunities for external communications via digital and social media. We will develop opportunities to jointly fund shared research activities with other interested parties, and will consider options for secondment and access to our facilities.

What HSE will do to #HelpGBworkwell

We will lead and engage with others to improve workplace health and safety by:

- Influencing the health and safety system by mining data to address issues that affect productivity and performance now and in the future;
- Working with others through joint investment or Shared Research to solve shared problems;
- Assessing the effectiveness of our science engagement activities and knowledge transfer to help understand the impact of our research.

We will secure effective management and control of risk by:

- Learning and disseminating the lessons from health and safety incident investigations;
- Developing better analytic processes that generate intelligence relating to the broad circumstances under which the different types of incidents occur.

We will provide an effective regulatory framework by:

- Generating the evidence to underpin a regulatory framework that delivers a safe, healthy and productive UK business base for the future;
- Continuing to support the simplification of the regulatory framework through our research;
- Providing the evidence base to target effective de-regulation where required.

We will reduce the likelihood of low-frequency, high-impact catastrophic incidents by:

- Developing an intervention strategy that leads to development, deployment and maintenance of safe technology and infrastructure;
- Understanding how materials and structures degrade over time;
- Ensuring GB has evidence-based safety checks and testing requirements for existing and new technologies;
- Supporting HSE's role as an enabling safeguarder for emerging technologies through research and engagement with industry.

Further details and supporting information

HSE Science and Evidence Delivery Plan
<http://www.hse.gov.uk/research/content/science-evidence-plan-1617.pdf>

HSE's Health and Work Strategy
<http://www.hse.gov.uk/aboutus/strategiesandplans/health-and-work-strategy/health-and-work-strategy.pdf>

HSE Sector Action Plans
<http://www.hse.gov.uk/aboutus/strategiesandplans/sector-plans/index.htm>

Shared Research
<http://www.hse.gov.uk/aboutus/shared-research-programme.htm>

Government Science and Engineering (GSE) Profession Strategy
<https://www.gov.uk/government/publications/government-science-and-engineering-profession-strategy>

HSE Science and Evidence Strategy
<http://www.hse.gov.uk/research/content/science-evidence-strategy-1620.pdf>

HSE Annual Science Review 2017
<http://www.hse.gov.uk/research/content/science-review-2017.pdf>

HSE Summary statistics for Great Britain 2016
www.hse.gov.uk/statistics

HSE Foresight Report 2016
<http://www.hse.gov.uk/horizons/assets/documents/foresight-report-2016.pdf>

PEROSH www.perosh.eu/

ICOH www.icohweb.org/