

# HSE's Science and Research Centre welcomes scientists of the future

Scientists of the future got to see at first hand the excellent work that goes on at the Health and Safety Executive's (HSE) Science and Research Centre in Buxton.



A-Level students from Meadowhead School in Sheffield spent time at the specialist facility meeting HSE scientists and hearing from them about their careers, career paths and academic route into science.

The visit, organised by HSE, encourages students to think about science, technology, engineering, and maths (STEM) as a future career.

A group of 21 students started the day with a tour of the wider site, looking at the experimental facilities and test rigs and received an overview of the type of projects and science-based work that has been conducted in Buxton over the years.

Smaller groups of students based on their A-level choices then spent time with relevant specialists including engineers, biochemists, fire and explosives specialists, analytical chemists, human factors specialists, toxicologists, noise and vibration specialists, ventilation specialists, and microbiologists.

Professor Andrew Curran, HSE's Director of Science, said: "We are very proud of all our facilities and our specialist scientists, engineers and analysts at Buxton and this visit allowed students to speak to our inspirational scientists who were able to showcase some of their work first hand.



“We hope we’ve helped broaden the students’ views of hands-on science, technology, engineering, and maths by showing them areas of work they may not have considered before and how rewarding a career in STEM can be.

“Visits like this are really important as they can trigger a ‘wow’ moment for a student which inspires them to take a new direction in their career.”

HSE’s Science and Research Centre is set on a 550-acre site in Buxton, Derbyshire, and accommodates an impressive inventory of laboratory and large-scale testing facilities.

Around 380 scientists, engineers, occupational health and hygiene specialists and support professionals are based at the site. Here they provide the research and evidence that HSE requires to underpin its regulatory activities, protect people and places and make Great Britain one of the safest places in the world to work.



Cerys Evans, careers leader at Meadowhead school and sixth form, added: “Students were keen to find STEM-related work experience, but were struggling to find the right settings within travelling distance, which is where the team at HSE stepped in.

“Students found out about the work carried out at the centre, touring the facilities, hearing from specialists, and finding out more about specific experimental activity linked to biology, chemistry, physics, human factors and engineering.

“Students will then put together a presentation of their experience to be shared with younger students at school. Many thanks to HSE for offering our students this great opportunity to explore STEM careers.”

## Notes to editors:

1. [The Health and Safety Executive](#) (HSE) is Britain's national regulator for workplace health and safety. We prevent work-related death, injury and ill health through regulatory actions that range from influencing behaviours across whole industry sectors through to targeted interventions on individual businesses. These activities are supported by globally recognised scientific expertise.
  2. Further details on the latest [HSE news releases](#) is available.
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## [Company and director fined after HSE inspectors find unusable toilet](#)

A construction company and its director have been fined after they failed to provide suitable welfare facilities at a construction site in Belsize Park, North London.

East Sussex firm ID8 Design and Build Ltd was in charge of the site on Carlingford Road where the company was carrying out a full refurbishment of a two-storey flat into a converted house, including the erection of front and rear dormers.

A Health and Safety Executive (HSE) inspection of the site on 29 November 2021 found the welfare facilities did not comply with the minimum requirements as set out in Schedule 2 of the Construction (Design and Management) Regulations 2015; the toilet provided was not flushable and was in a room without a door or window coverings. There was no sink, no hot water, no soap and no towels – cold water only was available from a pipe in the room next to the toilet. No rest area had been set up by the company either.



The unusable toilet on site

ID8 Design and Build Ltd was then issued with an Improvement Notice by HSE requiring the firm to ensure suitable welfare facilities were available at the site. HSE guidance on welfare facilities for construction sites can be found here: [Construction: Welfare – Managing occupational health risks in construction \(hse.gov.uk\)](https://www.hse.gov.uk/construction/welfare/)

However, a second inspection by HSE on 5 January 2022 found no sufficient improvements had been made as required by the Improvement Notice issued.

At Westminster Magistrates' Court on 15 February 2023:

- Having pleaded guilty on 18 January 2023 to breaching Section 33(1)(g) of the Health and Safety at Work etc. Act 1974, ID8 Design and Build Ltd, of Blatchington Road, Hove, East Sussex, was fined £1334 and ordered to pay costs of £1748.
- Having pleaded guilty on 18 January 2023 to breaching Section 33(1)(g) of the Health and Safety at Work etc. Act 1974 by virtue of Section 37(1) of the act, ID8 Design and Build Ltd director Adeel Bhatti, of Blatchington Road, Hove, East Sussex, was fined £416 and ordered to pay costs of £1622.07.

HSE inspector Emma Bitz said: "Providing suitable and sufficient toilets is an absolute duty and there is no exception to them being provided or made available. The reality is that many of the smaller sites we inspect don't have basic facilities at all.

"Inspectors will not hesitate to take appropriate enforcement action against employers who fail to comply with an Improvement Notice. Welfare is a fundamental and basic necessity for workers. It is also required by law."

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2. More information about the [legislation](#) referred to in this case is available.
3. Further details on the latest [HSE news releases](#) is available.

HSE Guidance on welfare facilities for constructions sites can be found here: [Construction: Welfare – Managing occupational health risks in construction \(hse.gov.uk\)](#)

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## [Exeter farmer fined after teenage worker injured on dumper](#)

A farmer has been fined £8k after a teenage worker suffered serious head injuries when a six-tonne dumper he was driving overturned.

The 19-year-old and his friend, who was just 16, had been paid to move material as part of improvement works at Upper Kingswell Farm in the village of Longdown in Exeter.



The team suffered serious head injuries when the dumper overturned

However, farmer Richard Palfrey had failed to ask either for their age or what experience they had before giving them a short briefing of what he wanted them to do. Soon afterwards, [the dumper overturned on a steep incline](#) and although the 19-year-old ended up in intensive care, he managed to make a full recovery.

Yeovil Magistrates' Court heard about an area of land being excavated and

levelled on the farm on 4 August 2019. The teens had been paid to move the excavated material using a dumper owned by Richard Palfrey, who was in charge of the excavation works at his farm. The young workers had only been on the farm for a few hours before the incident happened.



The teen made a remarkable recovery after the incident

An investigation by the Health & Safety Executive (HSE) found that Richard Palfrey did not ask the two young workers their ages or make any enquiries into their training or experience in operating dumpers. He gave the two young workers a very short briefing on what he wanted them to do but the steep route that he told them to take with the dumpers was inappropriate as it was steeper than the dumper manufactures said the dumpers could work on. The dumper that rolled had a seat belt but the seat was covered with a fertilizer bag meaning that the seatbelt could not be worn.



The seat was covered with a fertilizer bag meaning that the seatbelt could not be worn.

Richard John Palfrey of Upper Kingswell Farm, Exeter pleaded guilty to breaching Section 3(1) of the Health & Safety at Work etc. Act 1974. He was fined £8,000 and ordered to pay costs of £15,324.40.

Speaking after the hearing, HSE inspector Simon Jones said: "Farmers should ensure that only properly trained and qualified people use work equipment on their farms.

"Farmers should ensure that any equipment that they provide is safe to use.

"In this case Mr Palfrey allowed young and inexperienced workers to operate

work equipment that could not be used safely. A dumper should only ever be operated by a trained driver and the seat belt should always be worn.

“These young and untrained workers should never have been allowed to operate the farm dumper.

“Young workers need careful nurturing and damaging them in this way can affect their future development.

“If Mr Palfrey had made the proper checks then this young worker would not have sustained the life threatening head injuries.”

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2. More information about the [legislation](#) referred to in this case is available.
3. Further details on the latest [HSE news releases](#) is available.
4. Guidance about [dumpers and the hazards posed by them](#) is available

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## **[Health board fined £180,000 after patient dies](#)**

A health board has been fined £180,000 after a patient died while being treated at a hospital.

Colin Lloyd, 78, was brought to Raigmore Hospital, Inverness, on 6 February 2019 following a suspected fall at his home and later admitted to the hospital’s surgical ward.

While in hospital, Mr Lloyd suffered from three additional falls on 6, 12 and 14 February 2019, which led to bleeding on the brain.

Mr Lloyd passed away from fatal head trauma two days after his final fall.

An investigation by the Health and Safety Executive (HSE) found NHS Highland, the health board responsible for Raigmore Hospital, failed to provide the necessary nursing staff to ensure the 1:1 ratio of care was applied.

NHS Highland, of Assynt House, Beechwood Park, Inverness, pleaded guilty to breaching Regulation 5(1) of the Management of Health and Safety at Work Regulations 1999. The health board was fined £180,000 at Inverness Sheriff

Court on 31 January 2023.

HSE inspector Penny Falconer said: “This incident could so easily have been avoided by simply carrying out correct control measures and safe working practices.

“Organisations should be aware that HSE will not hesitate to take appropriate enforcement action against those that fall below the required standards.”

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2. More about the legislation referred to in this case can be found at: [legislation.gov.uk/](https://www.legislation.gov.uk/)
3. HSE news releases are available at <http://press.hse.gov.uk>

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## [HSE publishes restriction opinion on tattoo and permanent make-up inks](#)

- 60-day consultation on socio-economic analysis opinion also published today.

A detailed analysis on substances that could cause health risks to adults in Britain who get tattoos or permanent make up has been published.

Following a six-month [public consultation last year](#) on a restriction proposal for certain hazardous substances in tattoo and permanent make up inks, the Health and Safety Executive (HSE), in its role as the agency for UK REACH, has published [its risk assessment opinion](#).

This is the first analysis of its kind to have been published under UK REACH, the standalone chemicals regime established after the UK left the EU.

Today’s published opinion on the restriction proposal was developed after considering responses from last year’s consultation. Additionally, in line with the legal requirements under the UK Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation, HSE also opened a 60-day public consultation on the draft socio-economic opinion for the same dossier. Any comments that will help HSE with this assessment should be submitted [here](#).



Dr Richard Daniels, HSE's Director of Chemicals Regulation Division, said: "Tattoo and permanent makeup inks could contain substances that are harmful to us. Some of these substances, for example, could trigger allergic reactions in the skin.

"We have listened carefully to the tattooing community. For example our proposals refer to two pigments which would, after careful assessment, be allowed to be used.

"While tattoo artists have measures to keep their work hygienic, there are currently no regulatory controls in Great Britain for substances in inks used for tattooing and permanent makeup."

HSE also met stakeholders to gather information and discuss the proposal. The opinion was reviewed by a Challenge Panel made up of independent experts from the [REACH Independent Scientific Expert Pool \(RISEP\)](#).

Based on the responses received from the first public consultation, the options being taken forward reflect the concentration limits in the Classification, Labelling and Packaging Regulations for substances in scope due to their classification. These limits are intended to protect human health.

As the most common cause of ill health from tattooing and PMU procedures is infection which could be caused by inadequate sterilisation of ink, as well as poor hygiene in the studio or poor aftercare by the client, these options also allow more flexible use of substances which have preservative properties to help the sterility of inks. The concentrations included with the identified options are also broadly able to be measured using widely available methodology.

The proposed restriction also includes a derogation for 19 pigments including Pigment Blue 15:3 and Pigment Green 7. HSE's review of the available hazard information for these 19 pigments did not identify evidence indicating they are unsafe if used in tattoo or permanent makeup ink.

Taking into account the widespread concern expressed by the tattooing community about the impacts to tattooing if Pigment Blue 15:3 and Pigment Green 7 are withdrawn from use, and the lack of identified alternatives which are technically effective and safe, it is deemed appropriate to permit the continued use of these 19 pigments.

HSE did however remove Pigment Red 83 (CAS: 72-48-0) and Solvent Violet 13 (CAS: 81-48-1) from this derogation because the review identified data indicating potential concerns for skin sensitisation for both substances.

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2. HSE is the Agency for UK REACH and therefore has responsibility for the majority of the regulatory functions under UK REACH. In the delivery of these functions, HSE is supported by and/or reportable to a number of other government organisations.
3. HSE news releases are available at: <http://press.hse.gov.uk>.