

University of Northumbria fined after botched experiment nearly kills students

The University of Northumbria at Newcastle has been fined after two students fell seriously ill following a laboratory experiment.

Newcastle Crown Court heard how students were learning about the effects of caffeine as part of a sports experiment. Part of the course included a practical exercise where volunteer students would take quantities of caffeine to demonstrate the impact.

Two of the volunteer students drank a solution with 100 times the amount that should have been taken as part of the experiment. They immediately suffered from dizziness, blurred vision, vomiting, shaking and rapid heartbeat. They were rushed to hospital where their conditions were considered life threatening. Dialysis was required to rid their bodies of the excessive levels of caffeine.

An investigation by the Health and Safety Executive found that the protocols set out for the experiment were not followed. The instructions were to use 200mg tablets but as they were not available the students were provided with caffeine in a powdered form. This created a situation where the students miscalculated the amount of powder to use and overdosed the two volunteers.

University of Northumbria pleaded guilty to breaching Section 3 (1) of the Health and Safety at Work etc. Act 1974 and were fined £400,000 and ordered to pay costs of £26,468.22.

HSE inspector Cain Mitchell said: "Procedures where students are given supplements to assess their effect on the body need to be stringent and subject to very careful control. Caffeine is most popularly known as a constituent of coffee but it can be very dangerous and life threatening where pure caffeine powder is consumed.

"The University completely failed to control the risks during these experiments and two young students were made seriously ill which resulted in intensive care treatment for a number of nights. In other reported cases people have died after taking doses which were less than those administered to these two students.

"All organisations who engage in experiments where people are given chemical substances should ensure that the risks are fully identified and strict procedures are devised and followed to ensure that the experiments can be undertaken safely."

Notes to editors:

1. The Health and Safety Executive (HSE) is Britain's national regulator

for workplace health and safety. It aims to reduce work-related death, injury and ill health. It does so through research, information and advice, promoting training; new or revised regulations and codes of practice, and working with local authority partners by inspection, investigation and enforcement. www.hse.gov.uk

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

Journalists should approach HSE press office with any queries on regional press releases.

Three construction companies fined after worker fall

Three companies from Essex have been fined after a worker fell over seven meters through a fragile roof he was replacing.

Chelmsford Crown Court heard how Rafal Myslim was standing on the fragile roof at Dengie Crops Ltd in Asheldem, when the asbestos sheeting gave way and he fell 7.5m onto a concrete floor, hitting a number of pipes within the building on the way down. There was no safety netting or other protective equipment to prevent him from falling and he suffered a hematoma on the brain.

An investigation by the Health and Safety Executive found three companies at fault for the fall. Dengie Crops Ltd contracted Ernest Doe & Sons Ltd, who are an agricultural machinery supplier, to help the company replace their roof. Ernest Doe & Sons Ltd did not have the appropriate experience and subcontracted the work to Balsham (Buildings) Ltd who worked out how the roof replacement should take place. Balsham then subcontracted the actual replacement of the roof to Strong Clad Ltd.

Ernest Doe & Sons Ltd were unable to act effectively in their role as principal contractor because they had no experience of working in construction. They could not effectively oversee Balsham (Buildings) Ltd plans that had highlighted the risk of a fall. None of the parties involved put in place safety measures for 40% of the roof that did not have netting below. They relied too heavily on the verbal briefings to workers reminding them of where the netting was rather than putting in place effective safety measures for the whole roof.

Ernest Doe & sons Ltd, of Ulting, Essex, pleaded guilty to breaching Regulation 22 of the Construction (Design and Management) Regulations 2007. They were fined £360,000 and ordered to pay costs of £10,000

Balsham (Buildings) Ltd, of Balsham, Cambridge, pleaded guilty to breaching 4(1)(a) and 4(1)(c) of the Work at Height Regulation 2005. They were fined £45,000 and ordered to pay costs of £7,000

Strong Clad Ltd, of Castle Hedingham, Essex, pleaded guilty to breaching 4(1)(a) and 4(1)(c) of the Work at Height Regulation 2005. They were fined £7,000 and ordered to pay costs of £3,000

HSE inspector Adam Hills said: "The dangers of working on fragile roofs are well documented. Every year too many people are killed or seriously injured due to falls from height while carrying out this work.

"Work at height requires adequate planning, organisation and communication between all parties. This incident was entirely preventable and Mr Myslim is lucky to be alive."

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