

# Company fined for workers' excessive radiation exposure

A company which provides diagnostic imaging services, and its radiopharmaceutical subsidiary company, have been given six-figure fines following incidents at two sites in which employees were exposed to radiation levels in excess of the legal annual dose limit.

On 25 March 2019, a vial of a radioactive substance (FDG) leaked after it was installed into a shielded dispensing pot in the dispensing laboratory of Alliance Medical Limited's (AML) Positron emission tomography-computed tomography (PET-CT) facility at St James's University Hospital in Leeds.

This resulted in two members of staff becoming contaminated with skin doses in excess of the annual dose limit as defined by the Ionising Radiations Regulations 2017.

In a second incident, on 15 November 2019, the same radioactive substance was unknowingly handled during the production process at the Alliance Medical Radiopharmacy Limited (AMRL) facility at Keele University Science Park in Staffordshire.

Consequently, a member of staff was contaminated with a skin dose in excess of the annual dose limit as defined by the Ionising Radiations Regulations 2017.

An investigation by Health and Safety Executive (HSE) into the incident at the AML Leeds PET-CT centre found that training and instruction was inadequate and supervision below an acceptable standard. Staff were not made fully aware of the localised instructions and were using personal protective equipment (PPE) unsuitable for work with radioactive material.

A separate investigation by HSE found that at AMRL's facility at Keele University Science Park, the radiation warning system associated with the particular production equipment was not operational at the time of the incident and had not undergone routine maintenance and testing at suitable intervals.

Alliance Medical Limited, based at Icen Centre, Warwick Technology Park, Warwick, Warwickshire pleaded guilty to breaches of the Ionising Radiations Regulations 2017, Regulations 12, 18(3), 18(4) and 18(5)a, and were fined £300,000 and ordered to pay costs of £11,382 at Leeds Magistrates' Court on 29 September 2022.

Alliance Medical Radiopharmacy Limited, also based at Icen Centre, Warwick Technology Park, Warwick, Warwickshire pleaded guilty to breaches of the Ionising Radiations Regulations 2017, Regulations 9(2)a, 11(1) and 12, and were fined £120,000 and ordered to pay costs of £11,382 in the same court on the same date.

After the hearing, HSE specialist inspector Elizabeth Reeves said: “The workers in both these incidents were exposed to levels of radiation which could potentially impact on their health in the future.

“Employers in the nuclear medicine sector must properly assess the risks to their employees and others and ensure all radiation doses are as low as reasonably practicable.

“Both these incidents could so easily have been avoided by simply carrying out the correct control measures and ensuring safe working practices were followed. Companies should be aware that HSE will not hesitate to take appropriate enforcement actions against those that fall below the required standards.”

#### **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. [hse.gov.uk](http://hse.gov.uk)
2. More about the legislation referred to in this case can be found at: [L121 – Work with ionising radiation: Approved Code of Practice and guidance \(hse.gov.uk\)](http://hse.gov.uk/l121)
3. More information about working with ionising radiation can be found at: [Health and Safety: Ionising Radiation \(hse.gov.uk\)](http://hse.gov.uk/health-and-safety/ionising-radiation)
4. HSE news releases are available at <http://press.hse.gov.uk>

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## **[Construction company fined after worker falls through fragile roof](#)**

A construction company from Leicestershire has been fined £80,000 after an employee suffered serious injuries falling through a fragile roof.

An employee of Cairns Heritage Homes Limited was carrying out a repair to the roof of Nottingham Recycling Limited on 1 August 2019 when he fell approximately 7m to the floor below.

A scaffold tower had been constructed for access to the roof but there were inadequate measures in place to ensure that the work would be completed safely.

The worker accessed the roof, attempting to devise his own ad-hoc working

methods which included constructing a makeshift ladder/staging system from wooden planks.

An investigation by the Health and Safety Executive (HSE) found that Cairns Heritage Homes Limited had been contracted to repair the roof of the recycling plant while a 'bailing machine' was not being used.

Serious deficiencies in the planning and supervision of this work were identified together with the absence of a safe system of work.

There were insufficient measures to prevent a fall or minimise the distance or consequences of a fall such as safety netting. The makeshift staging provided by the employee was insufficient and failed to prevent a fall through the fragile roof panels resulting in them sustaining serious injuries.

Cairns Heritage Homes Limited, of Rectory Place, Old Parsonage Lane, Hoton, Loughborough, Leicestershire pleaded guilty to breaching Section 2(1) of the Health and Safety at Work etc Act 1974. They were fined £80,000 and ordered to pay costs of £9,981 at Nottingham Magistrates' Court on 28 September 2022.

Speaking after the hearing HSE Inspector Philip Gratton said: "Work on fragile roofs accounts for around a fifth of all fatal incidents that occur in the construction industry.

"Those in control of work on fragile roofs and other work at height have a responsibility to devise safe methods of work and to provide the necessary information, instruction, training, and supervision of their workers.

"If a suitable safe system of work had been in place prior to this incident, the life-changing injuries sustained by the employee could have been prevented."

#### **Notes to Editors:**

1. The Health and Safety Executive (HSE) is Britain's national regulator for workplace health and safety. We seek to 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. [hse.gov.uk](https://www.hse.gov.uk)
2. More about the legislation referred to in this case can be found at: [legislation.gov.uk/](https://www.legislation.gov.uk/)
3. Guidance on working at height can be found here: [Work at height – HSE](https://www.hse.gov.uk/work-at-height/)

4. HSE news releases are available at <http://press.hse.gov.uk>

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## [HSE launches campaign to combat serious aches, pains and strains in construction](#)

- Around 40,000 construction workers suffer injuries to muscles, bones, joints and nerves
- A thousand inspections in October and November
- Serious aches, pains and strains can affect every part of someone's life

Lifting and moving heavy objects on construction sites is harming the health of thousands of brickies and builders to such a degree every aspect of their lives is affected.

Experts at the Health and Safety Executive (HSE) are warning construction workers are picking up injuries and conditions that can stop them working and leave them struggling to stand, walk, or sit down.

HSE inspectors will be carrying out 1,000 inspections in October and November checking how workers are moving heavy or bulky materials.



The law requires employers to prevent the ill health of their workers, which includes injuries to muscles, bones, joints and nerves that can develop over time, known as musculoskeletal disorders (MSDs). However, recent figures show around 40,000 people in the construction industry suffer an MSD each year, which can cause years of agonising aches and pains.

Moving and handling risks should be considered and prevented where possible at the design stage. Once on site and before work starts, employers should talk to workers about controlling existing risks to make sure that the right training, aids and equipment are there to prevent injuries.

If moving and lifting is managed properly, a physical job on a building site should not result in aches, pains and strains which affect every part of workers' lives.

Matt Birtles, principal ergonomist at HSE, said: "Serious aches, pains and strains can affect every part of someone's life. They can struggle to get themselves dressed and undressed, they can be unable to pick up their children or grandchildren.

"They can struggle to sit down and stand up, they can struggle to keep still and move around. The most intimate parts of their lives can be severely affected – they might be desperate to go the toilet but find themselves unable.

"It's not something that many people feel comfortable talking about, perhaps particularly on a building site, but if your back has gone or if you're in agony whenever you move your arms, measures need to be put in place to address the causes."

HSE's head of construction, Sarah Jardine said: "Inspectors are visiting a range of construction sites to check the action businesses are taking to ensure their workers are being protected.

"Everyone involved in construction has a role to play in keeping people safe. Risks must be managed where they can't be prevented, and risk management arrangements must be reviewed frequently to ensure they are effective.

"We want everyone in the industry, from designers to contractors and their workers, to be aware of the risks associated with any moving or lifting task and put appropriate measures in place.

"This is a significant health issue for tens of thousands of construction workers and can lead to a lifetime of terrible aches and pains. The health of workers must be considered when planning construction work so that they can carry out their jobs without fear of injuring themselves, including being provided with the correct equipment to lift safely.

"Thankfully there are measures that can be taken to prevent injuries to muscles, bones, joints and nerves. Doing so is good for workers and good for the construction industry. It's good for business."

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behaviours across whole industry sectors through to targeted interventions on individual businesses. These activities are supported by globally recognised scientific expertise. <https://www.hse.gov.uk/>

2. HSE has a tool which can be used by employers to assess the risks to their workers of ill health. It can be found at: [Manual handling assessment charts \(the MAC tool\) \(hse.gov.uk\)](#)
3. More information about the HSE campaign, *Your Health, Your Future* can be found at: [WorkRight Construction: Your health. Your future – Work Right to keep Britain safe](#)
4. Statistics on the incidence of MSDs are published in the annual Labour Force Survey – [LFS – Labour Force Survey – Self-reported work-related ill health and workplace injuries: Index of LFS tables \(hse.gov.uk\)](#)
5. Support for the HSE campaign, *Your Health, Your Future*:

Lawrence Webb, President-Elect, Institution of Occupational Safety and Health (IOSH) said:

“Musculoskeletal disorders, or MSDs, are one of the most widely-reported work-related health conditions. They have a huge impact on the lives of many people around the world, impairing their ability to work and their overall quality of life.

“This doesn’t have to be the case. Employers have a legal duty to protect their workers and this includes putting measures in place to prevent MSDs.

“And there are simple steps they can take to achieve this. Simply assessing moving and handling tasks to identify the risks, and then either eliminating the hazard at source or implementing controls that reduce the risk, will have a lasting benefit on the lives of construction workers, organisations and communities.

“IOSH is delighted to support HSE’s campaign. Working together is vital to raise awareness of MSDs, how to eliminate or manage them where necessary in support of construction worker health.”

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## [Firm failed to control risks to employees from vibration](#)

Two partners in a construction firm have been fined for failing to adequately control the risk to its employees from exposure to vibration when using vibrating tools.

Employees of Roywood Contractors worked at various construction sites using vibrating tools without adequate control. As a result, an employee who had

been working at the company for 12 years suffered significant ill-health from hand-arm vibration syndrome (HAVS).

An investigation by the Health and Safety Executive (HSE) found that on or before the 15 January 2020 the company failed to adequately assess the risk to employees from exposure to vibration.

They did not have appropriate measures to control exposure or place employees under suitable health surveillance to monitor their condition.

Andrew Hatto and Paul Kiff, trading as Roywood Contractors, of Tilford Road, Tilford, Farnham, Surrey pleaded guilty to breaching Regulation 6 (1) and 7 (1) of the Control of Vibration Regulations 2005. They were each fined £1,150 and ordered to pay costs of £3,500 each at Basingstoke Magistrates' Court on September 20.

Speaking after the hearing, HSE Inspector Leah Sullivan said: "This was a case of the company completely failing to grasp the importance of hand-arm vibration syndrome health surveillance.

"If they had understood why health surveillance was necessary, it would have ensured that it had the right systems in place to monitor worker's health and the employee's condition would not have been allowed to develop to a severe and life altering stage."

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## **[Company fined £200,000 after worker injured cleaning machinery](#)**

A company specialising in the manufacture of stabilisers and additives used in plastic products has been fined £200,000 after an employee suffered serious hand injuries while cleaning machinery.

An employee of Mexichem Specialty Compounds Limited was cleaning the manufacturing line at their site in Chinley, Derbyshire on 21 February 2019

when he was injured. Tonne bags are loaded into a hopper on the line and passed through a rotary valve into final product bags.

The man was attempting to clean a rotary valve, standing with one foot on the machinery framework and the other on a ladder, when he slipped.

As he tried to steady himself, his right hand went into the unguarded rotary valve resulting in a severed fingertip and lacerations to his hand.

An investigation by the Health and Safety Executive (HSE) found that the company did not have a suitable and sufficient risk assessment or safe system of work in place for cleaning the bagging line.

Operators were also not provided with appropriate information, instruction, and training on how the line should be cleaned. The rotary valve was not guarded and there was no isolation procedure in place for when cleaning was taking place.

The system of work in place at the time of the incident involved working at height, this had not been properly planned.

Mexichem Specialty Compounds Limited, of Beler Way, Melton Mowbray, pleaded guilty to contravening Section 2(1) of the Health and Safety at Work etc Act 1974 and was fined £200,000 and ordered to pay costs of £7,846.78 at Derby Magistrates Court on 6 September 2022.

Speaking after the hearing, HSE inspector Lindsay Bentley said: "All operations and tasks, including cleaning, should be risk assessed. A safe system of work should have been produced and communicated to all operators.

"There is plenty of guidance available on the HSE website to help companies implement good health and safety arrangements to prevent such incidents."

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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>
4. Links to further guidance can be found at:  
<https://www.hse.gov.uk/pubns/indg163.pdf> – Risk Assessment – A brief guide to controlling risks in the workplace,  
<https://www.hse.gov.uk/pubns/priced/l22.pdf> – Safe use of work equipment – Provision and Use of Work Equipment Regulations 1998,  
<https://www.hse.gov.uk/pubns/indg401.pdf> – Working at height – A brief guide



