

The fatal dangers of working in the recycling industry

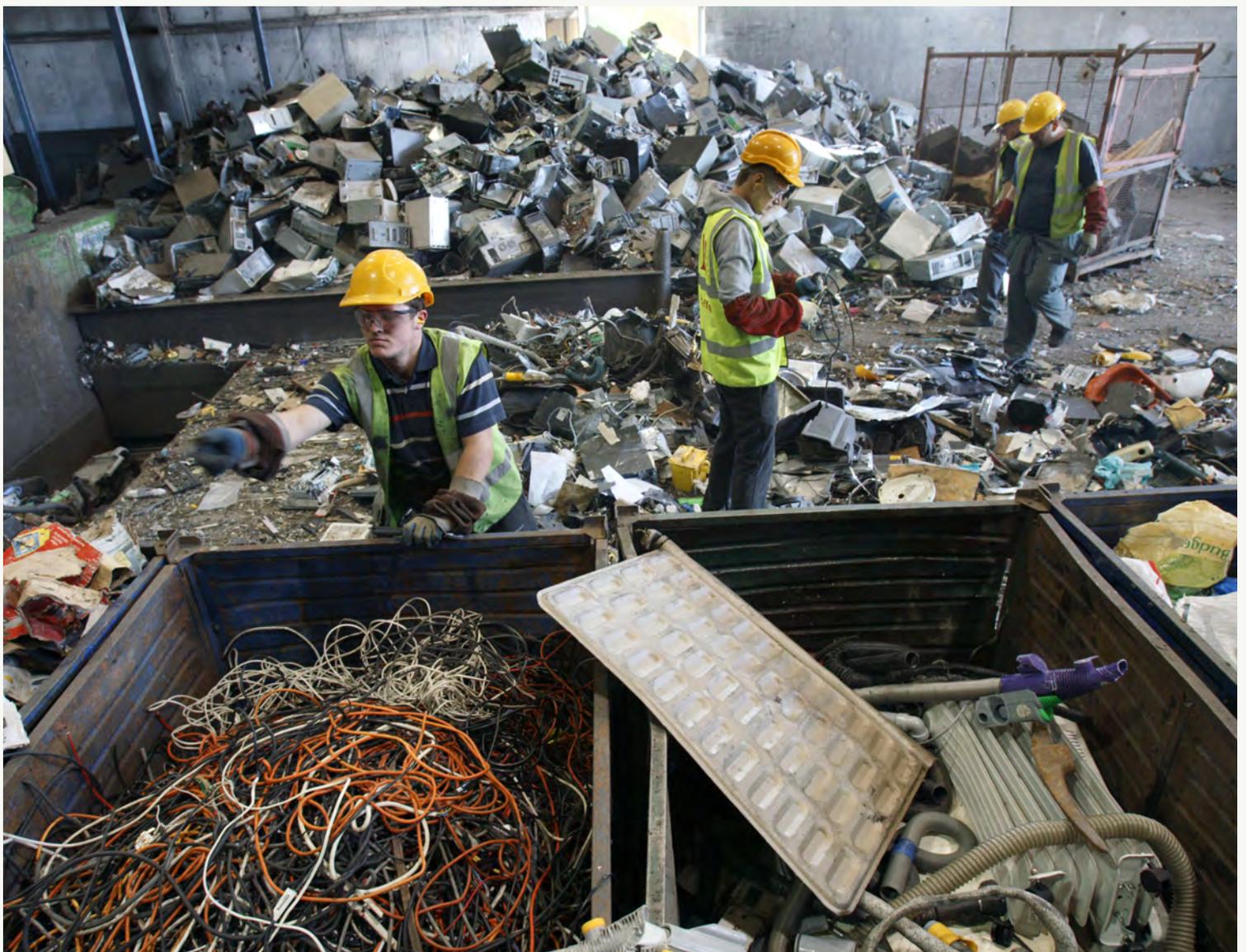
The UK's waste treatment and recycling industry is breaking workplace injury records. Its workers have double the injury risk of building workers. The Health and Safety Executive – the UK's workplace safety inspection authority – is campaigning to change matters. Trade unions want a crackdown on rule-dodging employers.

Rob Edwards

Free-lance journalist

Constant upgrading of computer technologies swamps recycling firms with mountains of obsolete equipment containing all kinds of compounds, some of them toxic.

Image: © Justin Tallis/
reportdigital.co.uk



Mark Wright was "a big soft teddy bear of a man", according to his mother, Dorothy. And he was worried about safety standards at the recycling plant where he worked at Saltney in North Wales.

On 12 April 2005 he was told by his boss to put more than 3 500 aerosol cans into a mechanical crusher. They exploded and caught fire, sealing a door and trapping Mark inside. When he was freed, he walked to an ambulance before collapsing with 90 per cent burns.

"In the one act of kindness shown to us, the hospital kept our son on a life support system long enough for us to drive the five hours needed to be there to say our goodbyes," said Dorothy. "He was 37 years old. He had been with his wife since he was 19 and had two children whom he just adored."

Since their son's untimely death, Dorothy and her husband, Douglas, have been fighting for justice. Their long and ultimately frustrating struggle has helped expose the serious dangers of working in the burgeoning waste recycling business in the UK. It has also highlighted deep flaws in the way the country's judicial system handles health and safety at work.

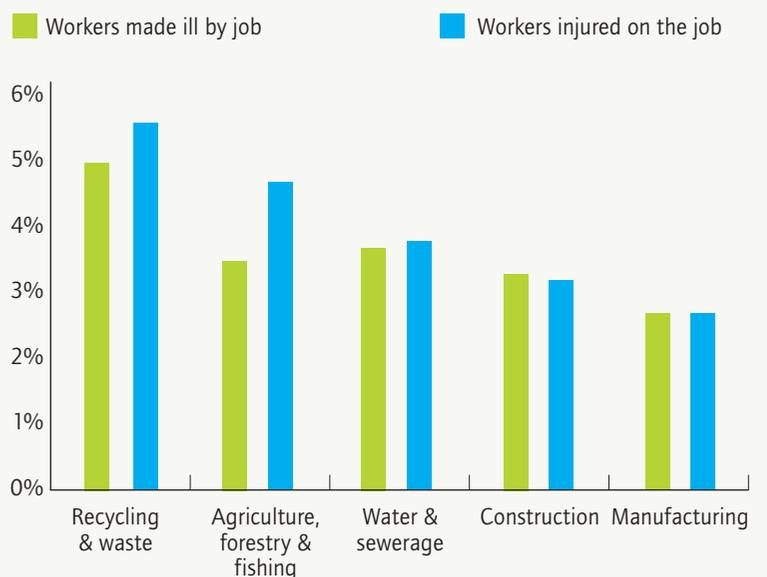
The Crown Prosecution Service initially decided that there was not enough evidence to charge the company, Deeside Metal, or any of its managers with manslaughter. Then after an inquest into the death in 2009, it announced that it was pursuing a charge of manslaughter against the general manager, Robert Roberts.

But this was rejected by a trial judge as an "abuse of process" because it was too long after the accident. Roberts was left to face a lesser charge of breaching health and safety legislation, to which he pleaded guilty and was fined £10 000 (12 000 euros) by Caernarfon Crown Court in December 2010.

At the same time, Deeside Metal was fined £100 000 for breaking health and safety law. Deeside Metal then appealed against its fine, and in December 2011 it was halved by the Court of Appeal. The company from which the aerosol cans had come, Jeyes, was also fined.

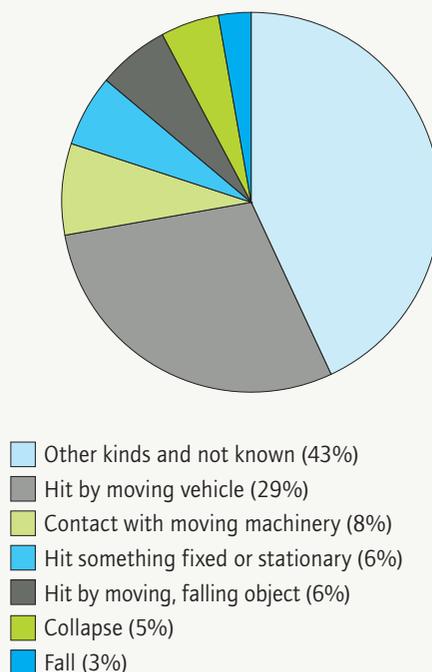
The Wrights received an apology from the Crown Prosecution Service for the way the case was mishandled, but the whole experience has left Dorothy deeply disillusioned. She told *HesaMag* that she has lost all faith in the police, the justice system, and the government's Health and Safety Executive (HSE). "I live with an ever present feeling of betrayal and anger at a country that has treated my son as just another disposable business commodity," she said.

Graph 1 Illness and injury in UK recycling and other industries 2009-2012



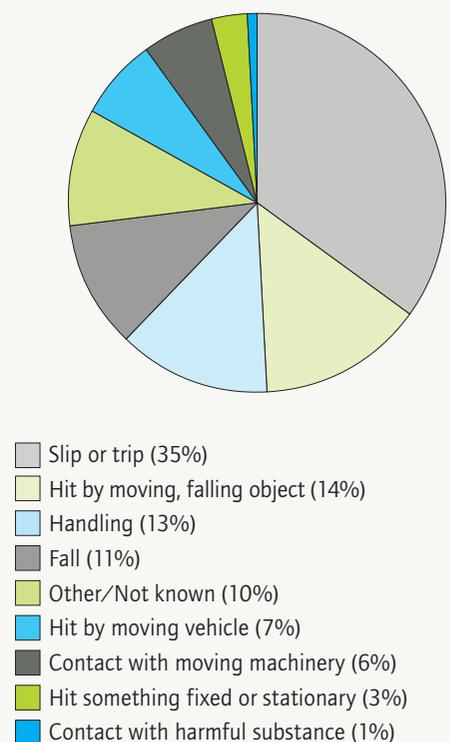
Source: Health and Safety Executive

Graph 2 Fatalities to employees in waste and recycling, by kind, 2007/2008 to 2011/2012



Source: www.hse.gov.uk/statistics/index.htm

Graph 3 Major injuries to employees in waste and recycling, by kind, 2007/2008 to 2011/2012



Source: www.hse.gov.uk/statistics/index.htm

1. Searl A. and Crawford J. (2012) Review of health risks for workers in the waste and recycling industry, Institute of Occupational Medicine. Downloadable on: <http://www.bohrf.org.uk/>Downloads>

"Without vigorous policing and inspection of recycling premises, coupled with legal action proportionate to the crime of taking a life – including the accountability of individual directors – sadly I cannot foresee a time when employers in the recycling industry will not risk workers' lives for profit. It is one of the most dangerous industries in Britain."

A death rate 16 times higher than average

There is no doubt that recycling waste in the UK is a relatively hazardous occupation. In the last nine years, official figures show that 83 workers have been killed, often by moving vehicles or machinery. In 2012-13 twelve people died, which according to HSE is 16 times higher than the average for all UK industries.

More than 3 000 recycling and waste workers are injured every year, a rate four times higher than the average for all industries. HSE has estimated that more than one in 20 recycling workers suffer ill health or injury because of their jobs. This is significantly higher than other reputedly dangerous trades like farming, forestry and fishing, and nearly twice as high as in construction and manufacturing.

At least 140 000 people work in the waste and recycling industry, making up less than one per cent of the UK's working population. But the industry accounts for nearly three per cent of all reported injuries to employees (see Graph 1). The industry grew by almost five per cent between 2012 and 2013, as central and local government try to recycle more of the 75 million tonnes of waste produced every year in order to meet European targets to cut the amounts dumped as landfill.

Recycling workers also face insidious long-term risks from the dust, toxic metals and infections to which they can be exposed. A 2012 study by the Institute of Occupational Medicine in Edinburgh pointed out that current safety limits for dust failed to

Worker crushed to death

Geraint Eagle was just 21 when he was crushed to death at a recycling plant at Bridgend in Wales. He was hit by a lorry while lying on a weighbridge chipping dried mud off sensors on 2 December 2010.

Eight months after he died his girlfriend, Elizabeth Evans, gave birth to his son, Garren. "This was a horrific incident with tragic consequences," said Sarah Baldwin Jones, an inspector with the government's Health and Safety Executive (HSE). "There were multiple failings at the site, which should have been obvious and could easily have been addressed."

The company that ran the plant, Nolan Recycling, should have closed the weighbridge while it was being cleaned, she pointed out. They should have kept workers away from moving vehicles, and provided proper training for Eagle.

The company pleaded guilty to breaching the 1974 Health and Safety at Work Act at Cardiff Crown Court on 25 September 2013. It was fined £250 000 (300 000 euros).

"We all miss Geraint very much," said his father, Paul Eagle. "This tragedy has had a huge impact on the family. I hope other businesses will learn lessons from this and put workers' safety first. No other families should have to go through what we have been through."

protect workers¹. "Exposures to dust at many waste-handling sites are likely to give rise to significantly increased risks of chronic respiratory illness," it concluded.

Exposures to lead, mercury and other hazardous metals at scrap metal yards and electrical waste recycling facilities "may be sufficient to give rise to toxicity," the study warned. "Workers who have direct contact with waste materials are potentially at risk of infection due to the presence of articles such as disposable nappies and discarded needles in wastes."

Although the evidence was limited, the institute expressed concern that the industry may be building up serious health problems for the future. "The mobility of the labour force and long time scale over which serious respiratory illness may develop means that there may be a hidden burden of ill-health associated with working in the waste and recycling industry," it said.

Hundreds of inspections planned

HSE, the UK government agency responsible for ensuring health and safety at work, accepted that there was a "terrible toll" from recycling. "The bottom line is that if you work in waste and recycling you are more likely to have an accident, or a fatal accident, than if you work in other industries," said Wayne Williams, an inspector on HSE's waste and recycling team.

That was why, along with agriculture and construction, recycling was being targeted as one of HSE's "priority" industries. HSE

inspectors are planning to make visits, mostly unannounced, to hundreds of recycling sites over the next two years. "Anyone who works in the waste industry should not be surprised if they see an HSE inspector knocking on their door," warned Williams. "If you haven't seen us for a while, we will be coming."

He attributed the high rates of injury, illness and death to several factors. The industry was very diverse, it was innovating and it contained a large percentage of small and medium-sized enterprises, which had fewer resources. He also highlighted firms' reliance on agency workers, who might not be experienced, and migrant workers, who might have language problems.

Along with employers and trade unions, the HSE has set up the Waste Industry Safety and Health (WISH) forum. It works to encourage good practice in waste recycling operations by issuing advice and guidelines, and in 2013 agreed a 24-point action plan. But Williams stressed that there was no "magic bullet" that could solve all the problems.

"A lot of effort is being put in by HSE and the industry to try and improve things," he said. "But it's not going to happen overnight." He expected that the recycling industry would remain a priority for the foreseeable future. He dismissed suggestions that his agency might be short of resources, saying: "HSE works with what it gets."

The key, Williams argued, was to work with other agencies to engage managers and workers throughout the industry. "This is an industry problem – they have the prerogative

to sort themselves out," he said. "There's isn't a policeman on every corner." Would HSE's strategy succeed? "Only time will tell," he replied.

Government cutbacks will have 'bloody consequences'

HSE's approach was broadly backed by the trade union, Unison, which encouraged workers and managers to work together to reduce the risks. "This means that very senior managers within organisations dealing with waste and recycling must take an active role in promoting health and safety," said Unison's Vincent Borg. "It also means that employers need to involve their employees."

Another trade union involved in the industry, Unite, took a slightly tougher line, arguing that employers had the "primary responsibility" for reducing the risks. "Enforcement is a proven and effective driver for health and safety compliance," said Unite's Susan Murray.

Unite strongly condemned a 35% cut in government funding for the HSE, and comparable cuts to local authority budgets. "This is dangerous for workers and sends the wrong message to those employers who have already have difficulty in complying with their legal responsibilities," stated Murray.

Professor Andrew Watterson, who heads the Occupational and Environmental Health Research Group at the University of Stirling, warned that HSE's cutbacks would have "bloody consequences". He questioned whether the regulatory agency had enough staff to effectively police such a fragmented and hazardous industry, suggesting that its "hotspot inspections" would only be able to cover a small proportion of sites.

"Vague partnerships with disparate stakeholders will not do the trick," he said. What was needed was "greater surveillance, regulatory enforcement and stiffer fines and prison sentences for those who kill and maim workers," he argued. "The industry has a whole host of well-established and mainly old disease and injury health hazards and needs far better control than it currently receives."

Hilda Palmer, acting chair of the UK's Hazards Campaign, pointed out the real harm being done by the industry was probably worse than that portrayed by the official statistics because many injuries and illness went unreported. "The problems occur across the whole sector from large to small companies, though they're worse at the smaller non-unionised end," she said.



The waste and recycling industries give employment to the least qualified young people. But at what cost!
Image: © Paul Box / reportdigital.co.uk

20 workers poisoned by mercury

Twenty workers were exposed to dangerous levels of mercury at a recycling plant at Kirkheaton in Huddersfield between October 2007 and August 2008. The mercury came from fluorescent light bulbs.

Ventilation problems at the plant meant that workers breathed in toxic mercury fumes, as well as lead from recycling televisions and computer monitors. They complained of ill health, with one woman alarmed about the risk to her unborn baby.

An investigation by HSE and the Environment Agency found that 20 workers had levels of mercury in their bodies above recommended safety limits. Five of them were said by HSE to have "extremely high levels" of the poison.

"This is a shocking case involving a large number of employees, many of them young and vulnerable, who were suddenly faced with the worrying possibility of damage to their long-term health," said HSE Inspector Jeanne Morton.

"The risks associated with handling toxic substances like mercury have been known for generations, so it is all the more unacceptable that something like this has happened. The company failed to see the risks created by their recycling work and failed to develop effective plans for safe working."

The company, Electrical Recycling Group, pleaded guilty to breaching health and safety law, as well as rules governing hazardous substances at Bradford Crown Court on 5 February 2010. It was fined £140 000 (170 000 euros), while its director, Craig Thompson, was fined £5 000 (6 000 euros).

Worker loses arm

Domingos da Conceicao Freitas had to have his right arm amputated after it was trapped at a recycling plant at Barking in London on 17 August 2012. The 28-year year-old can no longer work, and struggles to wash and dress.

An agency worker, he helped sort waste on a conveyor belt into different bins by hand. When the mechanism became blocked, he was asked to clear it by inserting a wire between a roller and the moving belt.

As he did so, his arm was caught and crushed by the roller. The procedure should have been carried out by two or three workers, one of whom would have been responsible for ensuring the conveyor belt was switched off.

An investigation by HSE concluded that two openings on the conveyor system should have been guarded to prevent this kind of accident. "Mr Freitas has been left with a permanent, life-changing injury as a result of an incident that could easily have been avoided," said HSE inspector Gabriella Dimitrov.

The company MSK Waste Management and Recycling appeared in Westminster Magistrates' Court on 23 October 2013 and pleaded guilty to breaching regulations on the safe operation of machinery. It was fined £10 000 (12 000 euros) and was ordered to pay a further £5 944 in costs plus £5 000 in compensation.

"The onus is on companies like MSK to acknowledge the dangers posed by unsafe machines and risky methods of work for clearing blockages, and to take action," added Dimitrov. "Incidents of this kind occur all too often in the recycling sector."

"The sector shades into unregulated and dangerous criminal activity paying vulnerable workers cash-in-hand for demolition and scrap work where injuries and illness are unreported. More enforcement action against employers with unsafe and unhealthy practices, based on frequent proactive inspection, more support for union safety reps, and rigorous action taken on concerns expressed by workers are essential."

Accidents reduced 70 per cent by some companies

The waste recycling industry is represented by the Environmental Services Association (ESA), which said it covered 85% of the sector. This included major players like Biffa, Cory Environmental, Shanks, Sita, Veolia and Viridor, but it left out many smaller businesses. ESA accepted that "historically" the industry had "not had the best health and safety record."

In 2004 ESA set itself the target of reducing the incidence of reportable accidents by ten per cent a year. Though that hasn't been achieved every year, it has been exceeded in other years, resulting in a drop of almost 70 per cent in accident rates at member companies between 2004 and 2011, according to ESA. It said it had revised its strategy in recent years to maintain momentum.

"While we of course have much further to go, there is little indication that this level of performance has been repeated across the waste sector as a whole," stated ESA's policy executive, Stephen Freeland. He wanted HSE to publish a more accurate breakdown of its accident data so that the problem areas could be better identified and tackled.

He pointed out that the industry was undergoing a major transformation, as companies moved away from landfill towards sorting, recycling and energy-from-waste incinerators, sometimes involving investments of hundreds of millions of pounds. "But this brings a set of new health and safety challenges," he said, because more people were working more closely with heavy vehicles and machinery. "Higher recycling targets will require a greater range of materials to be collected for recycling, potentially increasing workplace exposure to new materials."

Freeland argued that government recycling policies should take greater account of health and safety. "While efforts to collect glass separately from other recyclable materials may help to promote high quality recycling, separate glass collections present their own unique health and safety challenges to workers," he said. "Greater volumes and diversity of materials will be handled in future, so the technology and health risks need to be fully explored."

None of this, however, is of much comfort to Dorothy Wright, who helped found the campaign group, Families Against Corporate Killers. "I not only lost my son at the hands of an employer who thought more of money than Mark's life, but I have lost the ability to feel real joy, pleasure and peace of mind," she said.

"There is not a single day goes by that I do not think of Mark and wish I could have protected him. I'd like to think that by telling his story I can save someone else's life by changing the attitude to health and safety in Britain." ●

More information

Dorothy and Douglas Wright on the death of their son: www.hazardscampaign.org.uk/fack/about/markwright.pdf

Families Against Corporate Killers: www.hazardscampaign.org.uk/fack/about

Hazards magazine on the risks of green jobs: www.hazards.org/greenjobs

Health and safety statistics in the waste sector: www.hse.gov.uk/statistics/industry/waste-recycling/index.htm

www.esauk.org/esa_policies/people_health_and_safety/stats

"The sector shades into unregulated and dangerous criminal activity paying vulnerable workers cash-in-hand for demolition and scrap work where injuries and illness are unreported."