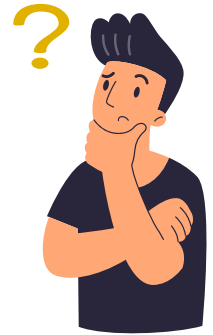


Welcome to another edition of 'Astute Safety Thinking' In this month's edition:

- Conflict Avoidance - Violence at Work.
- Why Astute Safety Consulting
- Time to Breathe Campaign - British Safety Council.
- Regulator's report on "forever chemicals" published.
- Safety Alert - Exposure to diacetyl vapour in food and drink manufacture
- Companies sentenced after worker hospitalised for nearly two weeks.
- Company fined for pitting workers at risk of exposure to radiation.
- Construction company fined £800,000 after death of 10-year-old boy.
- World environment day - Saturday 6 to Monday 8 May 2023.
- Father's Day - 18 June 2023



## Conflict Avoidance - Violence at Work

Violence at work is defined by the HSE as:

**“Any incident in which a person is verbally abused, threatened or assaulted in circumstances relating to their employment.”**



Violence in the workplace can take a number of forms:

- Shouting at someone.
- Name-calling.
- Physically attacking someone, e.g. by jostling, pushing or kicking etc.
- Attacking someone with a weapon or something that could be used as a weapon.
- Threatening someone with demotion or dismissal.

Gender, race, age, gender identity, disability, sexual orientation, and religious belief can increase the likelihood of a person being assaulted.

Violence at work can be caused or made worse by the following factors:

- Drink, drugs, or inherent aggression/mental illness.
- Resentment (having no right to appeal decisions).
- Impatience.
- Frustration (due to lack of information or boredom).
- Anxiety (lack of choice, lack of space).
- Poor design of work premises.

### Covid-19

The Covid-19 pandemic saw the emergence of a unique workplace threat, where individuals falsely claimed to be virus-infected, using deliberate coughing or spitting as a weapon. As businesses transitioned from lockdown to a COVID-secure 'new normal', employers had to assess and manage the risk of this form of COVID-19 aggression.

### Risk assessment

Employers must identify if there is a risk of violence at work when carrying out their risk assessment. They should consider whether employees:

- Handle complaints or disputes.
- Work with people who have a history of violence.
- Deal with customers face-to-face.
- Handle large amounts of cash.
- Work in a business that is open at night, and which is in an area recognised as violent.
- Work with high-value goods for sale i.e. tobacco, alcohol, medicines etc.
- Lone work
- Care for people who are ill, distressed, afraid or on medication
- Deal with people who unrealistically expect their complex and enduring problems to be resolved quickly and easily.
- Enforce legislation and/or restrict the freedom of individuals.

### Risk Management

If a risk of violence at work is identified, appropriate steps must be taken to control the risk.

# Why Astute Safety Consulting?



## Risk Assessments

Understanding your risks and managing them are the most effective things you can do to improve safety.

Risk assessments are fundamental in understanding what might go wrong and outline preventative measures. It is so important to take on board the opinions of people carrying out the work and that an experienced health and safety professional helps guide the process.



## Accident Investigation

If there has been an accident in the workplace, we will work with you to investigate and put forward solutions to reduce the chance of a reoccurrence.

Any accident or near-miss is an opportunity to learn safety lessons, and we will help you identify the issue and there is a clear plan of action.

## Online learning

We've teamed up with Video Tile Learning to offer you the latest online learning resources, designed to improve you and your team's safety awareness and knowledge. You choose the subjects and learn at your own pace.



## Control of Substances Hazardous to Health (COSHH)

This course covers what you need to know about the Control of Substances Hazardous to Health. It's aimed at anyone who is exposed to Substances Hazardous to Health at work, as well as line managers with responsibility for such people.

**Approved by IIRSM & Institute of Hospitality**  
**125 mins**



## Level 1 Health and Safety in a Construction Environment (Leading to CSCS Green Card)

Health & Safety is a significant concern. Everyone has an essential role to play in reducing deaths and accidents at work. Failure to meet the requirements of Health and Safety regulations carries serious consequences so understanding these requirements is vital.

This course is aimed at those starting out in the construction industry and provides an introduction to some of the key aspects of health and safety on and around construction sites. It can be taken along with the accredited exam to provide you with a recognised qualification that can form part of your CSCS card application.

**Approved by ETA Awards**

**BROWSE OUR TRAINING  
MODULES**

## Time to Breathe Campaign- British Safety Council.

B R E A T H E

40,000 deaths a year are caused by air pollution, according to a government report. Outdoor workers have been ignored for too long as our pollution crisis deepens. They have a right to clean air. It is Time to Breathe.

Time to Breathe calls on employers, policymakers, and regulators to start taking seriously the risk of ambient air pollution to the health of outdoor workers.

Outdoor workers in their thousands include street cleaners, refuse workers, traffic police, cycle couriers, construction workers, maintenance workers, newspaper sellers, gardeners, teachers, or security guards working on busy roads. As a group, they help us cross the road, guard our children, fill potholes, deliver our food, and ensure we have clean water, electricity, Wi-Fi, or cycle lanes.

Time to Breathe is calling for:

- Employers to take ambient air pollution seriously and protect their outdoor workers from the worst levels of toxic air
- Improvements to pollution monitoring across the UK so that all regions have the same accuracy as London for emissions data
- The UK to adopt World Health Organisation (WHO) exposure limits for the main pollutants of nitrogen dioxide, particulate matter and ozone
- Everyone to reduce their pollution footprint. Let's use clean energy, cycle, and walk more to reduce emissions.
- Workers and trades unions to raise this issue with their employers and show the evidence about the risks.

For more information, please visit <https://britsafe.org>



## Regulator's report on "forever chemicals" published

A report published on Tuesday 4 April has set out in detail the extent to which so-called "forever chemicals" are used in Great Britain.

It has analysed how "forever chemicals" or PFAS (Poly- and perfluoroalkyl substances) are used. The report has also included exposure from everyday items such as food wrappers, cleaning products, and furniture coatings.

PFAS are pollutants that are slow to degrade. They are often called "forever chemicals" because they do not naturally breakdown and can stay in the environment for decades.

In the most comprehensive British analysis of these chemicals ever, the Health and Safety Executive (HSE) has identified the most common and most harmful uses of PFAS and what measures could be put in place to control and manage them. You can find out more information [here](#).

# Exposure to diacetyl vapour in food and drink manufacture

Issue date: 01/23

## Issue

Exposure to vapour from diacetyl, often used as a flavouring and a by-product of coffee roasting, can lead to severe and irreversible lung disease. Even if diacetyl is present at low concentrations within mixtures or flavourings, exposure to its vapour may be above safe workplace exposure limits (WELs).

## Outline of the problem

HSE scientific studies show that heating diacetyl above certain temperatures significantly increases airborne concentrations and the potential for exposures above safe workplace limits.

## Risk in coffee manufacture

Exposure levels during bean roasting and grinding can exceed WELs. The amount of diacetyl generated naturally during bean grinding is temperature dependent. Concentrations are significantly greater if the roasted beans are ground when still warm (around 40°C) and reduced if the beans are cooled between roasting and grinding down to room temperature (around 16-20°C).

## Risk in flavour manufacture

Airborne concentrations and the potential for exposures above safe workplace limits is significantly increased if flavour mixtures containing diacetyl, even at low concentrations (below 5%) are heated, added to hot processes or spray dried.

Risk of exposure can occur during:

- opening of diacetyl or flavouring containers
- decanting and weighing
- mixing
- spray drying to produce powdered mixtures.
- packaging
- cleaning of vessels or spillages



## Hazardous substance workplace exposure limit (WEL)

Diacetyl (CAS: 431-03-8), also known as 2,3-butanedione, is a naturally occurring organic compound but is also manufactured synthetically. Diacetyl vapour can be generated as a by-product during the roasting and grinding of coffee beans and may also be present during brewing of some beers. Synthetic diacetyl is classified as a hazardous substance. It is toxic if inhaled, can cause skin irritation and eye damage by contact and harmful if swallowed.

WELs for diacetyl were published in [EH40/2005 Workplace Exposure Limits](#). Limits are at 20 parts per billion (ppb) or 0.02 parts per million (ppm) over an 8-hr time weighted average (TWA) and 100 ppb or 0.10 ppm over a 15-min TWA period. Suppliers' safety data sheets for diacetyl or for mixtures containing diacetyl should list these WELs, the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) require employers to ensure work-related exposure is assessed, prevented, or adequately controlled so that it is below the WELs.

# Exposure to diacetyl vapour in food and drink manufacture

## Action required

### Assess the risk

If your processes include the use of diacetyl, food flavourings that contain diacetyl, or are likely to produce diacetyl, then you must carry-out a risk assessment. Your risk assessment will help you to identify the hazards associated with the potential for exposure, understand who might be harmed and how, evaluate the risks and decide on precautions.

### Check the safety data sheet

If diacetyl is not mentioned on a safety data sheet for food flavourings (which are likely to contain it) you should contact the supplier to confirm if it is present or not.

### Sample

If there is a potential for diacetyl exposure use sampling and analysis to verify whether exposure is likely to be above the WEL.

### Substitute

Substitute to a safer alternative product. Substitutes should not contain compounds similar to diacetyl such as 2,3-pentanedione.

### Control risk of exposure

If substitution is not a viable option (for example if diacetyl is a natural by-product), then strict controls must be implemented:

1. Keep the flavouring at a low temperature (below 4°C) as this will significantly reduce vaporisation
2. Enclose the process and use extraction, to control diacetyl vapour emissions at source
3. For coffee manufacture, cool the coffee beans (to at least below 20°C) pre-grind.
4. For diacetyl flavouring manufacture and use, add the flavouring at the last stage of production and via an enclosed or automated system
5. Where the above controls do not reduce exposure below the WEL, you should consider providing suitable personal protective equipment (PPE), including suitable respiratory protection equipment (RPE).



### Health surveillance

If there is a reasonable likelihood that workers may be harmed by diacetyl you must introduce a health surveillance programme. Your risk assessment will help you decide if this is required. A health surveillance programme should be devised in consultation with an occupational health provider

### Carbon Monoxide (CO)

Carbon monoxide is also known to be a by-product in coffee processing. Control of diacetyl through enclosure and extraction will also help control CO emission. HSE recommends that as part of a risk assessment process, you carry out sampling to establish whether any further controls for CO might be necessary.

Please visit <https://www.hse.gov.uk> for further information regarding guidance and relevant legal documents.





### Companies sentenced after worker hospitalised for nearly two weeks

Two construction companies have been sentenced after a worker was hospitalised for nearly two weeks after being struck by a 124kg panel.

The man was working as a lift supervisor at a construction site in Newcastle, on 22 January 2020.

He had been using a tower crane to lift a structured insulated panel (SIP). During the lifting operation, the SIP struck steelwork and fell on top of the worker.

He spent 13 days in hospital following the incident after fracturing his collarbone, shoulder blade, left ankle and left rib.

An investigation by the Health and Safety Executive (HSE) found Tolent Construction Limited, the principal contractor, had failed to properly plan, manage, and monitor the construction phase.

This resulted in a failure to ensure a suitable and sufficient lift plan was in place for the lifting of individual SIPs. Most importantly, the lift plan failed to stipulate how the individual SIPs were to be safely lifted and failed to consider proximity hazards or how the SIPs would be adequately controlled during the lifting operation.

Read the full article [here](#)

### Company fined for putting workers at risk of exposure to radiation

A company in Cornwall has been fined after putting its employees at risk of exposure to ionising radiation over a ten-year period.

The company's failure to address these issues continued until the Health and Safety Executive (HSE) carried out an unannounced inspection of the foundry in February 2019.

For the full article read [here](#)



### Construction company fined £800,000 after death of 10-year-old boy.

A Scottish civil engineering contractor has been fined £800,000 for safety breaches after a 10-year-old boy died after falling down a manhole on a building site in Glasgow.

Ten-year-old Shea Ryan went out to play with his friends on the evening of 16th July 2020 and got onto the construction site where he was able to enter a manhole within which, he fell.

Read the full article [here](#)



5 June 2023 is world environment day. It has been celebrated annually since 1973 and encourages awareness and action for the protection of the environment.

Led by the United Nations Environment programme, it has grown to be the largest global platform for environmental outreach. It is celebrated by millions of people across the world.



This year Father's Day is on 18 June 2023. It is a special day about celebrating fathers.

It is a day to show your father, stepfather or other male relative or friend who cares about you, just how much you love him.