

### Do you use Compressed and Liquefied Gases? What you must know!

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*"Wherever there is danger, there lurks opportunity; whenever there is opportunity, there lurks danger. The two are inseparable."*  
Earl Nightingale (internationally acclaimed speaker. Died 1989)

The recent incident involving a girl at a nightclub in Lancaster drinking liquid nitrogen at  $-196^{\circ}\text{C}$  has thrown the public spotlight onto the frequently ignored hazards of liquefied gases. The drama was made more poignant by the fact that the girl had to have her stomach removed, she was lucky not to be a fatality. If you think this incident is a one-off, think again. An article in New Scientist reports of a undergraduate taking a sip of liquid nitrogen to prove that it was safe. The undergraduate collapsed, had a scarred and perforated gastrointestinal tract, a collapsed lung and had part of her stomach removed.

#### What have these incidents to do with you?

Both employers and users have duties when using compressed and liquefied gases.

Should you have a serious incident with these products, any subsequent HSE investigation will cover all aspects of their use and this will certainly include looking into your training.

#### Let us see what you must know

Must employees be trained in the safe use of compressed and/or liquefied gases?

Yes. The Health and Safety at Work Act 1974, Section 2:2 says, 'employers must provide information and training to all who are exposed to risk'. The Provision and Use of Work Equipment Regulations 1998 makes clear that adequate information and training should be provided to users of work equipment. The British Compressed Gases Association (BCGA) Codes of Practice and Guidance Notes frequently refer to people using compressed and liquefied gases as needing 'formal training to demonstrate sufficient practical experience related to gas equipment.' In addition, reference is made to 'the theoretical knowledge of the function of the equipment and the properties of the gases used'.

#### How often should training take place?

There is no one correct answer. Training requirements will vary and may be determined by a number of factors. Such factors could include changes to job roles, personnel, gases or equipment.

It is easy to become complacent and for those familiar with gases, refresher training is recommended. This training also needs to be recorded with records kept for each employee.

#### Who states what training should take place?

The gases industry is governed by legislation overseen by the HSE and Codes of Practice issued by the BCGA. Typical training topics required are laid down in BCGA GN 23; Identifying Gas Safety Training Requirements in the Workplace.

A reputable compressed gases training provider will follow the outline topics in this document. Based on the gases you use and the processes involved, they will advise on training requirements which may include: the hazards and properties of the gases in use, gas cylinder construction, design and safety features, the correct use of gases equipment, manual handling, emergency procedures, storage and transport of cylinders.



#### Are all training providers and courses approved and accredited?

No. Check that the training provider is an associate of the BCGA and if they have been verified and audited by an awarding organisation, then decide on the level of assurance you require.

Widely available are attendance certificates, simply issued by the company providing the training. Approved and accredited courses are available from training companies who have been independently verified and audited by a relevant awarding organisation such as EAL (Excellence Achievement and Learning Ltd). Such companies may provide Certificates of Verified Achievement (CVA's) and Vocationally Related Qualifications (QCF's).

#### How long does training take?

This depends on the individual's job role and skills. Face to face training may take from a few hours up to 2 days. On-line training is also available however careful assessment is required to ensure it meets with individual requirements, not forgetting there may be no substitute for proper practical training

#### What is a Gas Safety Passport and is it a legal requirement?

Gas safety passports are not a legal requirement however, they provide evidence of a course syllabus delivered against criteria specified under the Health and Safety Executive passport schemes HSE INDG 381.

A gas safety passport provides immediate demonstration of training, shows the bearer has reached the required standard of knowledge and is excellent evidence of achievement when changing departments, job roles or moving employment.

Combined with a training provider who has been independently accredited, the collective is a powerful indication of training excellence.



#### What do I do now?

Identify all employees who use or come into contact with compressed or liquefied gases, including non-users such as stores personnel and those transporting gases. Do not accept employees stating they have grandfather rights and therefore do not require training. There is no such thing and it will not be accepted by the HSE after an incident.

It's time to separate the lurking danger from the lurking opportunity.



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