

# CO-Gas Safety Report of the Year 2022

January 2022 to January 2023

For more detail, please see <https://www.co-gassafety.co.uk/information/list-of-work-done/>

**CO-Gas Safety expresses great sadness at the death of the Queen who died on the 8<sup>th</sup> of September 2022. May she rest in peace after her long and great life of service.**

## Summary

Another year of hard work trying to persuade industry and government that testing for CO is vital for the prevention of poisoning by carbon monoxide (CO) and for correct diagnosis and treatment of survivors. Testing for CO is also needed to obtain data and provide evidence to persuade government and industry to make safety changes, which will prevent future deaths and injuries.

**Some success** in that Cadent informed us that it has undertaken sweep tests for CO and over 500 investigations into CO. This is a huge step forward under Ofgem's funding for CO and vulnerable customers – yet all are vulnerable to CO however healthy, wealthy or wise.

Recent research shows that even low levels of CO cause effects to the brain.

We continued to try to help survivors but without proof of CO even for medics, this is a heart-breaking task.

## Deaths from unintentional carbon monoxide (CO).

Thankfully, so far there seem to be either no deaths this year or only one death, but we await confirmation.

## We welcomed the new Smoke and CO alarm Regulations which came into force – for England on 01.10.22

The Regulations are different for the four countries that make up the UK. For an excellent summary please see <https://www.policyconnect.org.uk/news/carbon-monoxide-alarm-regulations-are-changing-are-you-ready> and scroll down to the four countries.

**For England** carbon monoxide alarms must be installed in **all rented** accommodation and new build properties where there is a fixed combustion appliance, excluding gas cookers. Carbon monoxide alarms are also required when a fixed combustion appliance (excluding gas cookers) is first installed in any home.

CO alarms will & do save lives. However, we think there was a missed opportunity to require CO alarms in all properties and also to require that the CO alarms comply with BS EN 50291, bought direct from the manufacturer or a reputable supplier, NOT the Internet.

We also know that the levels set by even BS EN 50291 are relatively high.

Therefore, CO alarms are excellent at preventing death/serious injury from CO but are NOT health monitors.

## We continued to lobby for CO alarms to be mandatory in homes with gas cookers in England but which otherwise have no other carbon fuelled appliances

The All Party Parliamentary Carbon Monoxide Group (APPCOG) agrees that gas cookers should be included.

### **Clean Air (Human Rights) Bill – we spent quite a lot of time on this vital legislation.**

We contacted Baroness Jones on 01.06.22 about her private member's Clean Air (Human Rights) Bill and received a lovely email from her. We were then asked to attend regular meetings run by Simon Birkett of Clean Air London on Wednesdays from 22.06.22 about the progress of the bill. The bill is not just about outdoor air but indoor air too. We had written to Baroness Jones in 2018 when she sponsored a similar bill. Simon Birkett and many others have all worked very hard on this bill.

We lobbied all the Lords and Baronesses we knew, and the bill completed its journey through the Lords. The bill is now going through the Commons.

### **Please lobby your MP.**

It is crucial to obtain support from MPs, particularly Conservative MPs, so please write to your MP and ask them to sign the Early Day Motion (EDM) see <https://edm.parliament.uk/early-day-motion/60394/the-clean-air-human-rights-bill> 38 MPs have signed so far (24.01.23 at 12.22) but not yet a single Conservative.

Clause 21 of the Clean Air (Human Rights) Bill which is about Interpretation defines "indoor air" as the 'quality of air in buildings'. We have suggested that it might be better if 'Indoor air' referred to the 'quality of air in any and all enclosed or partially enclosed spaces including buildings, garages, barbecue huts, caravans, cars, aeroplanes, boats and tents.' We raised this with Simon Birkett but agreed that it was important to get the bill through the Lords. We wrote again making this point on 18.01.23, now the bill is in the Commons. Please note there have even been CO open air deaths, e.g., <https://tinyurl.com/yv5nds7>

### **UN declares healthy environment – including clean air – a human right 28.07.22.**

The United Nations General Assembly passed a historic resolution declaring that everyone on the planet has a right to a healthy environment, including clean air, water, and a stable climate. <https://tinyurl.com/2v53v49z>

The resolution will empower people to claim their **rights to a healthy environment**. The UN General Assembly resolution, passed by a 161-0 vote on 28 July, is not legally binding on UN Member States.

**December 5th, 2022** marked the 70th anniversary of the start of the Great London Smog of 1952 which lasted for five days and led to an estimated 4,000 excess deaths during that month.

### **Recent Articles and Research**

We have listed some recent research and articles and put them on our website under <https://www.co-gassafety.co.uk/information/recent-articles-and-research/>

They are very interesting especially 'Every breath you take' in 2016 and the most recent ones in the past year or two.

In our opinion these provide support for the view of the late Harry Rogers, gas expert for over 30 years and who worked for the charity for years. He always said the **only safe level of CO is nil**. Please see <https://www.coresearchtrust.org/media-information/three-year-project-looking-at-risk-of-co-to-older-people-reveals-concerning-findings> This research was presented in October 2021 see <https://www.youtube.com/watch?v=Ou3K7K2mJmo>

**Continued to relate with companies producing any gadget that would monitor and ideally record CO at low levels.**

See <https://www.archyworldys.com/future-iphones-and-apple-watch-could-detect-poisonous-gas-and-pollen/> 2020 <https://www.azosensors.com/article.aspx?ArticleID=2602>

Huge networks of gas sensors could span cities, integrate into homes and workplaces, and enable automatic air quality monitoring to inform predictive maintenance and policymaking to keep people safer.

CO-Gas Safety considers all such gadgets should comply with a standard & be certificated to ensure compliance. CO-Gas Safety has written to Laura Fatah, manager of Policy Connect which supplies the administrative services needed to APPCOG asking if APPCOG could issue general advice.

**Continued to urge people and bodies to include CO-Gas Safety in their discussions and therefore give a voice to survivors and families of those who'd died of unintentional CO.**

For example, we asked to be appointed to the Gi Magazine Editorial board.

For example, in August we wrote to Joshua Atkins [press@energynetworks.org](mailto:press@energynetworks.org) asking if their search for diversity and inclusion applies to customers as well as staff. It seems it did not.

**Continued to lobby about testing for CO, whenever possible and particularly by the gas emergency service, whether on the Priority Service Register or not.**

The problem is that even capable people can be made incapable by CO and may need help to arrange servicing.

At a meeting in September, we asked the GDNs if they would please ask HSE to state that testing for carbon monoxide (CO) is a safety issue?

We asked for the leaflets about CO that are given out by the GDNs and offered to work with the GDNs to, for example, add some pictures.

We wrote to Sir Peter Bottomley MP and our patron, Lord Hunt of Kings Heath, our patron and Anna White of the HSE.

We pointed out that it is HSE that has the primary duty with regard to safety, not Ofgem.

In our letter to Anna White of the HSE, in March 2022 we wrote, 'You say, 'We understand that Ofgem does not consider it is reasonable or practicable to increase the requirements on ESPs to include the performance testing appliances when attending gas or CO emergencies. To contact Ofgem directly regarding their policy their details are available here [Contact us | Ofgem](#)'

**Safety is a matter for the HSE, not Ofgem - why are you encouraging us to contact Ofgem?**

Indeed, Senior Ofgem Policy Analyst Rebecca Pickett told us, if HSE stated testing for CO was a safety issue (and how can it not be?), Ofgem would find the funding.

In our opinion this correctly reflects the respective duties of Ofgem and HSE.'

In April as part of some feedback we wrote to CORT asking if CORT could take up the issue of testing? Kimberly Allen of CORT responded that it would be good for testing to be discussed.

**Wrote to Sam Oakley of the Department for Levelling up saying much the same in August 22.**

We attached our 'Numbers affected by CO\*' and pointed out that the respected university studies extrapolated over the whole of the UK show millions\*\* are being affected by CO at levels way above WHO guidelines.

\*<https://www.co-gassafety.co.uk/about-co/numbers-affected-by-co/>

\*\*One sentence extracted, 'The average of 22% and 18% = 20% had CO readings over 50 PPM, which means residents would feel CO effects within 15 minutes of being indoors.' **This equates to about 13 million people in the UK.**

**Continued to work as much as possible with the Gas Distribution Networks, which consist of four companies (Cadent, Wales & West Utilities, SGN and Northern Gas Networks) which together run the gas emergency service.**

Lobbied GDNs to bring back a prize giving event at the Houses of Parliament for their competition to raise awareness amongst school pupils. Safety Seymour (teddy bear with magical powers including finding CO) is successful and Cadent has taken it to schools in Jersey, half funded by CO-Gas Safety.

**Continued to ask Cadent for the film of the sweep test for CO by Cadent & received it 31.08.22.**

Gas appliances need to be turned on\* first. This sweep test for CO can be undertaken in minutes and is extremely helpful. See <https://vimeo.com/727002257/939926c093>

*\*Please note that when a customer calls the gas emergency service on 0800111999, they are told to turn everything off, open windows & doors and get out.*

**Continued to ask GDNs to fund a body doing what CO-Gas Safety does.**

For example, Elizabeth Warwick of Wales & West in January 2022, Dan Edwards in June 2022, and Phil Burrows of Cadent in July 2022. Phil asked us what such a body would cost and look like and what would success look like. We responded that there surely ought to be a body properly funded to help people, find out the cause of death and/or injury, record the deaths, injuries and support survivors and family members, collect other data and lobby industry and government to improve safety. Suggested such a body could be modelled on the Advertising Standards Authority. Cost is difficult to assess but Cadent has undertaken investigations so is in a better position to estimate the cost.

**Continued to relate with any politicians, companies etc. who believe that data is important, therefore testing is important.**

For example, medics are all keen on finding a cure for CO poisoning, which would be fantastic, but while we don't yet have a cure, and even if we do, prevention is surely better and can be done now.

**Continued to lobby, particularly APPCOG, for the landlords' gas safety check to include a mandatory test for CO.**

We have great support for this (see our New Law Journal article in 2018 <https://www.co-gassafety.co.uk/a-hidden-killer-published-by-the-new-law-journal-march-2018/>) but nothing has been done. As far as we know, although APPCOG supported our clarification/change, it hasn't even drafted a PQ/EDM about it. We've asked for a date to address the APPCOG advisory board on this issue but so far haven't received any response.

**Continued to try to find out the cost of testing a dead body for CO.**

Finally received a response from Cardiff Labs – about £32.50. We are very grateful to Cardiff Labs.

**Blood tests for survivors**

We had written to Isabella Myers about the need to dispel an impression by medics that arterial blood is needed for tests for CO. She responded helpfully with the following: -

NICE: [Scenario: Management | Management | Carbon monoxide poisoning | CKS | NICE](#)

And PHE: [Diagnosing Poisoning: Carbon Monoxide \(CO\) \(publishing.service.gov.uk\)](#)

Both documents highlight that for testing for CO exposure alone, a venous sample is recommended.

We are most grateful to Isabella Myers for clarifying this, but more awareness is needed amongst medics. Providing arterial blood samples can be distressing for patients.

**We continued to lobby IGEM, UKEIC, the GDNs and HSE.**

We have emailed HSE about the duty of the gas emergency service (ESP) (09.03.22).

Please note that in 2000 the HSC/HSE recommended:-

1. A levy on the gas suppliers to provide funds for raising awareness of the dangers of CO & for research and
2. That the gas emergency service carry & use equipment to test gas appliances for CO.

These excellent recommendations were not implemented, we understand because the gas suppliers stated they would do this voluntarily.

Cadent is testing for CO and undertaking CO investigations in homes with vulnerable customers.

IGEM is the leading professional body to lead the gas industry, so on 03.02.22, we asked Oliver Lancaster CEO of IGEM and Ian McCluskey CEng FIMechE FIGEM Head of Technical and Policy at IGEM, to support what we have been calling for since 1995, i.e. for the gas emergency service to have a legal duty to test air and gas appliances for CO and for tests of the air and appliances to be undertaken whenever possible. Testing would find the source of the CO and help survivors to receive correct medical treatment, by confirming CO.

Testing for CO, provided the results were recorded & collected, would also raise provide data and raise awareness. We attached our document headed 'Numbers affected by CO' (see <https://www.co-gassafety.co.uk/about-co/numbers-affected-by-co/>) and both articles in the House Magazine, one in September 2021 (<https://www.co-gassafety.co.uk/2021/09/>) and one in January 2022 (<https://www.co-gassafety.co.uk/2022/01/>).

We also wrote about the lack of CO as a topic for the IGEM conference, despite the fact that due to the cost of living, maintenance of gas appliances and chimney/flue sweeping and checking are being delayed or not done at all by consumers, particularly this winter due to poverty (2022-23).

**Continued to write to newspapers, magazines, such as Gi and New Scientist, organisations such as the Fawcett Society and social media** etc. raising awareness of CO and about other conditions such as ME, dementia, depression, long Covid etc., which could have been or be caused by CO.

For example, we wrote to the Times about the government's proposal to pay £25 million to tell the public how to save energy. We wrote saying that this £25 million is somewhat wasteful and insulting to people's intelligence, especially as there are few warnings about CO, which many people don't know about.

**Continued to try to find organisations abroad interested in CO.**

This year met **Charon McNabbs of NCOAA from the USA**. Charon has been exposed to CO and is running the organisation. We initially hoped the USA had testing for CO from something on the NCOAA website but sadly, this is not the case.

We also found **Energy Safe Victoria in Australia** and they were and are really helpful but are more of a regulatory body, like our HSE. ESV worked with a mother, who lost both sons to CO. She made excellent warning films which were put out on You Tube and also on prime-time TV.

**Continued to look out for safety re hydrogen** particularly with regard to leakage from the joints in the old gas pipes and whether hydrogen could escape and thereby become an explosion risk. Also made the point that the tests that have been done using hydrogen so far seem to be in houses that have all had gas safety checks recently.

**Wrote to Seve Critchlow of the HSE** about prevention of explosion. In a recent explosion case in 2021 in Ayr, Gorse Park there was an explosion which nearly killed a family of four. A trench had been filled with rubble which punctured the plastic around the natural gas pipe, causing a leak of

unburned gas and then an explosion. We asked who was responsible for the correct infilling? We asked if this could be clarified for the future to prevent a similar incident.

**Suggested that the Fuel Bank Foundation (FBF) fund a 'Service Bank'.**

We pointed out that vouchers to pay for gas might end in tragedy if the gas appliances had not been serviced or the chimney/flue swept or checked recently. Matt Cole of the FBF agreed and welcomed our idea but this needs funding. Apparently, funding is outside the VCMA funding, but we expressed a wish that other bodies such as Energy UK, UKEIC, gas appliance manufacturers, oil companies etc. could fund this. We did what we could to raise funding and offered £5,000 of our funds to start this off. We asked how many homeowners used the FBF and heard that **18% of the Fuel Bank Foundation users were homeowners** which is interesting and of concern, especially as so many homeowners do not have CO alarms.

**Worked on finding a media company to make us an animation and finally succeeded** and our animation came out in CO Awareness week [https://drive.google.com/file/d/1KA6tdwIDm10-yZtmJm4B8SQR0V\\_E72jz/view?usp=sharing](https://drive.google.com/file/d/1KA6tdwIDm10-yZtmJm4B8SQR0V_E72jz/view?usp=sharing)

**Ordinary people are trying to change things**

Ordinary people poisoned by CO have written to Ofgem, other bodies such as APPCOG, HSE, BBC, newspapers and their MPs about the energy squeeze and concerns they have with regard to lack of servicing and CO safety.

We are grateful and hope more people do this and raise our concerns on social media and write to their MPs and to anyone else involved or who is influential.

**For example, 19.10.22 Wednesday**

Received an email from someone called Chris, who had written before to us. He and his wife had suffered from CO in the past. He'd written to the BBC and his MP about the BBC reporting a Ukrainian woman using her gas stove to warm her. He wanted the BBC to put out a warning that people shouldn't do this in the UK. Stephanie Trotter wrote to his MP Jeremy Quin and suggested he rang the MP's office to make sure they'd got the email. We also asked him to send us the BBC email and suggested he wrote to Woman's Hour and to a director of Woman's Hour.

**09.10.22** Sunday evening received an email from T O'N, a CO survivor, to Ofgem and copied to just about everyone involved in gas and safety. The heading was: -

**RE: URGENT - Risk of Carbon Monoxide poisoning during the energy crisis and possible power cuts in the UK**

This pointed out the dangers of using old appliances due to the energy crisis and appliances not being serviced and also due to possible power cuts, using other fuels. Also due to Smoke and CO alarm Regs coming into force 01.10.22, there should be an urgent national carbon monoxide awareness campaign in newspapers/TV (both local and nationwide) and social media. This could cost approximately £14 million and the relevant CO risk information could be distributed relatively quickly. Proposed various other measures.

We wrote back but sadly didn't hear further.

**We sought an obtained a legal opinion which allows us to reimburse survivors** for the cost of obtaining an expert Gas Safe Registered Engineer to test for CO and write a report. We helped a disabled survivor who was a tenant to obtain an inspection by a gas expert investigator, who kindly said she couldn't have done this without our help. She will be writing a case study for us.

Please note that it took us weeks if not months to find a Gas Safe Registered Engineer with a qualification called CMDDA1 who was willing to visit and undertake an investigation. Please note that this cost £1,600. The cost to gas suppliers of a similar visit or even more of a full investigation we've been told by Morgan Lambert is about £350.

**Wrote to the National Audit office and received a kind response from Charles Nancarrow** from the National Audit Office – Regulation and People Development – We had sent quite a summary of the problems re CO and how not testing for CO was wasting NHS resources.

**Worked on an e-learning course on CO** which ended up being more of an encyclopaedia on CO! Not sure what to do with this yet. Suggestions would be very welcome.

**Continued to try to contribute to any surveys or research on CO** e.g., Tom Saunders of Frazer Nash who'd been asked to undertake research for Ofgem.

**Continued to respond to industry documents giving the survivors' point of view**, for example, IGEM/IG/1 Supplement 3 - Metering/Emergency Service Provider Natural Gas Training Specification – Utilisation. This is all about training for gas emergency personnel.

**Continued to attend APPCOG stakeholder meetings and provide updates on CO-Gas Safety's work.** These were chaired by Chris Bielby and later by Tom Woolley and take part in APPCOG campaigns e.g., their summer CO campaign.

**Continued to attend CORT lectures and talks. Attended the CORT conference in July.**

There was an excellent lecture by Hilary Wareing about CO in pregnancy. There was also an interesting talk by Dr Sophie Duggan about CO in cars. Sophie is a CO survivor, lawyer and a doctor and now a CO researcher.

There was also an excellent talk in December by PhD student Lucie Wilson. Research – using Functional MRI and also ultrasound. Could tell oxygen level of the blood and where the blood went in the brain on certain tasks. After CO less blood flowed. Very complicated and quite hard to follow. But it seemed low levels below WHO guidelines, could be seen to reduce blood flow. These talks seemed to impress everyone who attended.

The CORT conference in July was a great success. It was a good opportunity to meet medics and it was at the conference that we met Charon McNabbs of NCOAA, from the USA.

**Noted in December 2022.** We noticed that a British couple who died in Majorca of CO, but it took a maximum of three days to get the results – what a difference to the UK when results can take weeks or even months.

<https://www.lbc.co.uk/news/british-couple-killed-carbon-monoxide-poisoning-majorca/>

The reason delay can matter is the risk of CO to other residents in the property concerned.

**Continued to do what we can to support survivors.**

We often ask reporters, the police, HSE etc. to pass our details on to families and survivors because we offer free, independent, confidential help and advice. However, we have been told on several occasions this year, we think for the first time that CO-Gas Safety is not an 'approved body'. We have tried to find out how to become an 'approved body' but so far with no result. We would like another body to do our work, but until that body is set up, we cannot see why survivors and families are denied the help we can offer.



Supporting survivors is a very difficult task because without knowing whether or not they've been exposed to CO, or at least how high an exposure they've suffered, it is almost impossible to persuade medics that their symptoms are not imagined. However, we can assure them we understand how difficult it is for them and that many others are suffering in a similar way. Even this seems to help them.

Even when we obtain a Registered Gas Engineer qualified and willing to test for CO, very often this takes too long, and the survivor becomes disheartened before this can be completed. As one survivor we did manage to help this year said, 'it would be so much easier if the gas emergency service tested.'

### **Continued to ask for and help survivors and family members write case studies for our website.**

This year we have survivors' case studies from Amber Yates, Naila Mansoor, a Seaview couple & the Garstangs about a BBQ hut. We also have been given a case study about Michael Frosdick who died of CO in 2003 from his brother. We are so grateful for these and ask anyone who can contribute to get in touch with us. We will help with writing the case study. See <https://www.co-gassafety.co.uk/case-studies/> for our case studies.

### **Received the sad news of the death of Chris Bielby MBE.**

Until very recently Chris had chaired the Stakeholder group under APPCOG. He had worked for British Gas for decades and worked hard on all gas safety topics. We didn't always agree, but he was always kind enough to listen. He called CO-Gas Safety, the gas industry's 'critical friend'. We heard after his death, that he had come round to the idea of prime time TV warnings about CO. We were very sad that we didn't hear of his change of opinion, before his death. CO-Gas Safety has been selected to enter the Dragons' Den in an IGEM event in February to compete for the 'Chris Bielby award'. We will meet his widow and daughter at that event.

### **Funding**

The charity is very lucky to have been given £100,000 in 2020 from the relative of someone affected by CO but who wishes to remain anonymous to the public, (although we know who this is). The charity is also thankful to have received funding of £2,000 per month from Kane International since February 2022. We do greatly appreciate the support Jonathan Kane provides, not only financially but also technical help and advice based on industry expertise.

### **Thanks**

Huge thanks to all our directors/trustees & advisers particularly Paul Overton, Jim Lambeth and Sue Westwood for their unfailing help and advice. Also, many thanks to others who provide us with advice on fuel issues from time to time. Also, thanks to all those we write to who understandably get fed up with our lobbying, but who are mostly unfailingly polite.

### **The Future**

As I am writing this, I'm preparing to travel to London for a meeting on the 23<sup>rd</sup> of January called by Sir Peter Bottomley MP, Father of the House of Commons, an officer of APPCOG, who has kindly called a meeting 'Improving Carbon Monoxide (CO) outcomes and safety in homes.

The discussion is: -

- A. Managing CO risks
- B. Responding to emergency CO situations
- C. Challenges.

### **Perhaps there is hope at last.**

Stephanie Trotter, OBE, President & Director of CO-Gas Safety



