

CO-Gas Safety

Report of the year January 2023 – January 2024

General Summary

Another busy year but thankfully, a much more hopeful and positive one.

Looking ahead, January 25th 2025, will be the charity's 30th anniversary.

What is Carbon Monoxide

Carbon monoxide (CO) is a product of combustion which is deadly in less than 2% in the air and cannot be detected using any human sense of smell, sight, touch or feel. There are other toxins in the products of combustion, e.g. benzene.

Hydrogen now seems less likely to replace natural gas at least in the home, perhaps because it has a much wider flammability range and increased risk of explosion.

How to avoid CO

People can avoid being poisoned by CO, if they are aware of the dangers and know how to prevent CO by correct installation of all carbon fuelled appliances, regular maintenance and chimney/flue sweeping and checking as well as ensuring adequate ventilation. The law requires those who work on gas appliances to be registered by the Gas Safe Register and qualified to work on the appliance in question.

One in five home owners have never had a gas safety check, see <https://todaysconveyancer.co.uk/one-in-five-homeowners-have-never-had-a-gas-safety-check-research-reveals/> Gas safety checks are obviously needed because one in five UK homes contain potentially dangerous gas appliances see <https://www.nottinghampost.com/news/cost-of-living/one-every-five-uk-homes-8745256>

CO-Gas Safety was launched at the House of Commons in January 1995. From talking to survivors and families we quickly learned that raising awareness of CO, how to prevent it and testing homes and emissions from appliances for CO, needed action.

Studying tragedies and learning what went wrong is common in many other fields, e.g. air accidents. We collected, collated, and published deaths from proved unintentional CO, in order to learn about prevention.

A death from CO must have an inquest; evidence is gathered (e.g. was there a CO alarm present?) and given in court. Coroners and their officers have been very helpful to the charity, and we are most grateful to them. For our data, please see <https://www.co-gassafety.co.uk/data/>

However, injuries are more difficult. The blood or breath test of a survivor for CO is usually done too late and is unreliable, due to survivors breathing fresh air &/or oxygen. The consequence of this is an absence of data. This lack of data impedes correct treatment by the NHS, medical research and safety improvements for prevention.

The solution to this problem is surely to test the air the person was being exposed to? The obvious body to do this is the gas emergency service because they are able to act quickly, cover the UK and are the most impartial part of the gas industry. However, the gas emergency service does NOT test for CO using equipment to do this, as standard. Nor can GPs order such a free test of the air in a home.

Four companies are responsible for the gas flowing through the main gas pipes. These companies also run the gas emergency service. They are Cadent, Northern Gas Networks, SGN and Wales & West Utilities. They work in specific geographical areas of the UK, e.g. Wales & West works in Wales and the West Country. Collectively they are known as Gas Distribution Networks (GDNs).

Testing for CO is vital to identify the appliance emitting CO. Identification means that if CO is found in the home and the faulty appliance is the cooker, the central heating can be left on.

With gas, when the customer rings the gas emergency service number 0800111999, they are told to turn everything off, open windows and doors and get out. The First Call Operator (FCO) from the gas emergency service will attend promptly and if s/he suspects a leak of gas or CO in the products of combustion, the appliance or appliances or gas supply will be cut off. However, usually by the time the FCO arrives, all appliances will have been turned off and the CO will have left the premises.

Needed solution

What is needed is for the gas appliances to be turned back on again and tested for CO. Some excellent research by Northern Gas Networks in 2011-12 showed that testing could be done in between five and seven minutes. <https://www.co-gassafety.co.uk/giving-carbon-monoxide-nowhere-to-hide-by-northern-gas-networks/>

The charity has sought support for testing for CO from the whole of the fuel industry, in particular HSE, the Gas Safe Register, Ofgem and IGEM, the professional body of Gas Engineers & Managers.

Ofgem has special legal duties with regard to vulnerable customers and carbon monoxide. Ofgem is now thankfully providing millions (£171 million on a Use It Or Lose It basis) to the GDNs for carbon monoxide (CO) and vulnerable customers. This is beginning to make a huge difference to some customers.

All four companies that provide the gas emergency service are now doing some testing for CO or training their First Call Operators to do this. This initiative is being led by Cadent with Northern Gas Networks following quickly, then SGN and finally, Wales & West Utilities, which has now started to train engineers to test.

Testing has been undertaken by Cadent since April 2021. Cadent made a two-minute film showing the sweep test* and how easy it is to check for CO and shared this on the 31.08.2022. This was a huge step forward.

*<https://vimeo.com/727002257/939926c093>

In late June 2023, Paul Overton, Stephanie Trotter and Jonathan Kane were invited to attend a demonstration and presentation by Cadent's Wayne Merry and met several gas engineers. We discussed the unsafe situations procedure by IGEM and what to do when a CO alarm sounds.

Data

Cadent told us about 1,000 CO investigations had been completed at this presentation in June. This was an excellent day, and all the Cadent engineers were very keen to test for CO.

Cadent has recently informed us (17.01.24) of the following details of their work: -

2021-2022 – 241 Tests for CO.

2022-2023 – 941 Tests for CO.

2023-to date – 1387 Tests for CO.

SGN has very recently informed us (22.01.24) of the following details but please note that these were taken from a sample of sweep tests and CMDDA1 investigations SGN has carried out with their Care & Repair partner Universal Gas

SGN Sweep test sample of 20:

9 considered safe - yet 3 still had remedial work.

Of 14 needing work: 8 due to cookers, hobs, grills & ovens, 3 due to gas fires, 3 due to boilers & flues, Separately, 5 had CO alarms replaced.

SGN CMDDA1 tests of 6, all in homes only using gas:

3 prompted by CO alarms, 1 out of date & 1 replaced.

4 said they were experiencing headaches.

All recorded normal CO₂ levels outside property.

All passed gas tightness & leak tests, (of unburned gas).

None had external sources of CO affecting them.
 All passed sweep test.
 2 failed investigation - combi boiler & cooker.

We are grateful to Cadent and SGN for this data and look forward to much more data next year.

However due to the funding arrangements, this testing is currently only being done in homes of 'vulnerable customers' or 'customers in vulnerable situations'. This is largely being interpreted as those customers who are or would be eligible for the Priority Services Register, i.e. the poor, disabled, elderly, those with young children or living in remote rural areas.

Yet everyone is vulnerable to CO however healthy, wealthy or wise.

Free testing for all

CO-Gas Safety is lobbying hard for everybody to receive free testing of air and appliances in the home or workplace for CO, identification of the appliance emitting CO and if CO is found, the PPM (Parts Per Million) of CO provided in writing/digitally to the survivor and medics.

We have been informed that HSE and Ofgem have not related fully on this issue as they should do under the MOU* setting out their respective duties. Why not?

* <https://www.ofgem.gov.uk/publications/memorandum-understanding-between-gas-and-electricity-markets-authority-health-and-safety-commission-and-health-and-safety-executive>

We do not think everyone should be eligible for financial help with servicing or replacing old, dangerous appliances. But we do think all customers should have homes tested for CO whenever practicable to identify the dangerous appliance/s, which should be cut off.

CO affects the higher intellectual functions so there should be help in arranging a Registered Gas Safe Engineer with the correct qualifications to visit the property and undertake the necessary work. We also think some checks should be made to make sure this work has been done.

Because some testing for CO is being undertaken, we are now working with the gas emergency service to help survivors. Also, survivors want to thank the First Call Operators. We have worked with Cadent to produce a couple of interesting case studies, particularly that written by survivor, Rachel Brady (see <https://www.co-gassafety.co.uk/case-studies/> non-fatal). We have begun to work very constructively with SGN too. We look forward to continuing our cooperative work in the future with all the GDNs.

The GDNs are now creating data from testing for CO. We are keen to help the company SIA, collecting and collating this data for all the GDNs, to ensure the correct questions are asked and fields created. We have been told that SIA has its own statistician. CO-Gas Safety has almost 30 years of experience of collecting, collating and publishing data of proved CO deaths from 1995 and have received help from a senior statistician. We have asked several times to be put in touch with SIA, as soon as possible.

Survivor/Victim/Family Support

It seems that CO-Gas Safety is still the only body to attempt to provide specific help about CO to survivors. This help also has an obvious and helpful research aspect to it.

With the gas emergency service being provided with so much funding on a UIOLI basis, it seems strange to us that the gas industry does not seem to want to set up a body to do what CO-Gas Safety does on a shoestring with no employees (except Jennifer Wood who helps with the data and case studies on a paid, hours worked basis).

CO-Gas Safety is lucky to have received a generous donation from the family of a very tragic death and to receive ongoing support from Kane International. However, this is just enabling the charity to continue its voluntary work, not to take on staff. We are in danger of being overwhelmed as it is.

Such a body could be set up and funded by the fuel industry yet be separate from it. The template for such a body is the Advertising Standards Authority*, supported by a voluntary levy on the industry, which works well.

* [https://en.wikipedia.org/wiki/Advertising_Standards_Authority_\(United_Kingdom\)](https://en.wikipedia.org/wiki/Advertising_Standards_Authority_(United_Kingdom))

Technology

In our last full press pack* in 2020, we highlighted the role of technology to reduce these tragedies. Thankfully, CO alarms are being installed in more homes all the time. We are keen to promote CO alarms to EN 50291 bought direct from the manufacturer or from a reputable retailer, rather than from the Internet. It is also vital to take the CO alarm out of the packet and pull the tab to connect the battery. Some CO alarms, including one made by AICO can also record data about CO which can be downloaded.

* <https://www.co-gassafety.co.uk/wp-content/uploads/2021/01/Co-gas-safety-press-pack-2020-IMPO-proof.pdf>

However, it should be noted that although CO alarms are excellent at preventing death and serious injury, they are not health monitors. CO alarms do not alarm at low levels of CO, which from research can cause brain injury, at least to older adults. In our opinion and experience, low levels of CO are likely to injure all, particularly babies and small children.

There are monitors for CO. Lascar has been selling one for many years, is well respected and has been used for research see <https://lascarelectronics.com/data-loggers/carbon-monoxide/el-usb-co/>

KANE has recently brought out a new monitor and data logger KANE79 - the free KANE LIVE app can then be used to transfer and see results. Available from February 2024, it is self-certified to EN 50543. See <https://www.kane.co.uk/products/kane79-wireless-co-monitor>

Still no free or even easily obtained paid for test of CO for all homes

There is still no standard free or even easily obtained paid for test of air and appliances in the homes of all survivors. It is still virtually impossible for ordinary people or GPs to obtain the services of a Registered Gas Engineer (RGE) with a qualification called CMDDA1, which enables the RGE to test home and appliances for CO. Sadly, the Gas Safe Register, despite years of requests from us, still does not make it easy to find a RGE with this qualification e.g. by listing engineers with this qualification in geographical areas. The HSE licenses the GSR (Gas Safe Register), and we think could insist on this as a condition of their licence. We have asked HSE to do this.

HSE & Government action needed

The HSE is the organisation that could take action and ask the government for legislation to make testing for CO mandatory for Registered Gas Engineers, whenever practicable. In 2000 HSE recommended a levy for raising awareness of CO and for research and also for the gas emergency service to carry and use equipment to test for CO. Neither of these recommendations implemented and the HSE seems to us to refuse to take any action on CO, citing the lack of data. This seems to us to be a Catch 22 situation, somewhat similar to Mr Bates v The Post Office.

This winter there are huge concerns due to the economic squeeze. The main concern is that servicing and chimney sweeping, which help prevent CO poisoning, will be postponed or skipped, leading to deaths and injuries. See <https://londonlovesbusiness.com/brits-delaying-essential-home-maintenance-due-to-cost-of-living-crisis/>

We continue to collect and collate deaths from unintentional carbon monoxide poisoning and this year there were 6 deaths. We will publish our new updated data before the end of January 2024.

Case studies

These are put up on our website <https://www.co-gassafety.co.uk/case-studies/> this year.

Case studies put up from January 2023 to January 2024 were as follows: -

Seaview village anonymous 06.01.23

Richard Ashby 23.03.23

Garstang Tanya and Paul 27.03.23

Dan Howard 30.03.23

Fred Jackson-Phillips 12.09.23

CO-Gas Safety Report of the Year 2023-2024

Rachel Brady 26.10.23
Anonymous 07.12.23

We are very grateful to all those who provide us with invaluable help with these.

We put all case studies in chronological order of the dates the exposure to CO or the death occurred.

Quote by Survivors <https://www.co-gassafety.co.uk/case-studies/quotes-from-survivors/>
Astrid Gatenby Quotes 16.03.23

Quotes by Others <https://www.co-gassafety.co.uk/case-studies/quotes-from-others/>
Roland Johns, British Gas Engineer and trainer, retired. 11.01.24

General Comments looking back on the year.

Sir Peter Bottomley MP & Father of the House and member of APPCOG called a roundtable event at the House of Commons 'Improving CO safety in homes'.

Once the report of the year was completed at the end of January 2023, we spent a huge amount of time on a document for the Consumer Product Safety Commission in the USA (CPSC) on 'Law, Practice and Prevention of Unintentional Carbon Monoxide Exposure in the UK' at the request of Charon McNabb of NCOAA (National Carbon Monoxide Awareness Alliance).

We sent this to NCOAA and CPSC both in USA in April but asked for it not to be published until we had time to check the references and seek a legal opinion on publishing in the USA. Adding and refining this document is continuing.

IGEM's Chris Bielby award.

Jonathan Kane won this on testing for CO supported by CO-Gas Safety. This was a huge step forward.

Towards the Autumn there was a change at the All Party Parliamentary Carbon Monoxide Group (APPCOG). Tom Woolley became Chair of the Stakeholder Group and Gaelan Komen took over from Laura Fatah as manager of the stakeholders at Policy Connect, which supplies administrative services to APPCOG. They both approached CO with a fresh view and Gaelan, having come from a health background, was and still is, keen to learn how CO impacts victims and how to prevent exposure.

We also heard from two people of religion, one from the Church of England and one Methodist Minister. Both had suffered from CO poisoning in the past while living in Church property. We hope that they can help us raise awareness throughout the UK and possibly abroad. We are also concerned that many military homes do not have gas safety certificates see <https://www.forces.net/military-life/families/nearly-800-military-homes-found-be-without-valid-gas-safety-certificate>.

In November and December, we tried hard to help the mother of a child Isla Mae Oates who had died in foster care. The mother wanted the blood of her child tested for CO but sadly, by the time she contacted us, the inquest was over, therefore the coroner no longer had jurisdiction. The blood had not been tested before the inquest for CO because fire officers attending the scene had found no CO. Stephanie wrote to the coroner expressing the view that no CO at the scene after death, did not necessarily mean the child had not been exposed to CO. Although blood was still being preserved and the cost of testing was £35.54, which we offered to pay, it seemed there was no way to preserve the chain of evidence, which we think is wrong. Isla Mae's mother wants a change in the law to require testing for all those who have a post mortem. Isla's mother says, 'My hope is just to make sure that no mother or father and family has to through what we have been through and that they get the complete and full answers they need from their loved one's autopsy. Getting this made mandatory means that Isla-Mae will have helped change something that already should have been mandatory.' Baroness Finlay, co-chair of APPCOG, expressed the same view in 2011, so why has this not been done?

We thank Isla's mother. We will be writing to the Chief Coroner to alert Coroners to the need to test for CO in future in this sort of situation.

For more details of the work we do day to day and month to month please see <https://www.co-gassafety.co.uk/information/list-of-work-done/> but the main points of interest are listed below under each month.

Thank you to all our directors and particularly our work group for all their help. I also thank Jonathan Kane of Kane International, Wayne Merry and Suzanne Callington of Cadent, Dan Edwards of SGN.

Thank you to Gaelan Komen, manager of APPCOG, who has greatly cheered me by his willingness to listen, learn and for his 'can do' attitude. Tom Woolley as chair of the stakeholder group under APPCOG has also been a joy.

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

January 2023

We spent quite a lot of time and energy asking that Stephanie Trotter be allowed to be a speaker at the roundtable event on the 23.01.23 at the House of Commons and/or that she be allowed to have another trustee, victim etc. present. All denied.

Sent email reply to James Birkinshaw via Gas-Enquiries@hse.gov.uk of HSE. Attached 'Numbers affected by CO', NLJ 2018 about making it a specific duty to test for CO for a landlord's safety check, 'Giving carbon monoxide nowhere to hide' and sweep test video. Asked for testing for CO as an issue to be passed to his superiors and we wanted to see the Minister for HSE to discuss these issues.

Received a road map document from UKEIC so wrote back to ask why testing for CO did not seem to be innovative to UKEIC and attached 'Numbers affected by CO' <https://www.co-gassafety.co.uk/about-co/numbers-affected-by-co/> and copied Denise Massey.

Stephanie was asked for and sent a one-and-a-half-page brief to Simon Birkett of Clean Air London for MP Geraint Davies.

BS 40102-1:2023

In a breakthrough for clean air, the British Standards Institute has published a new 'Code of Practice' for 'Health and well-being and indoor environmental quality in buildings' that aligns to the World Health Organisation's new air quality guidelines for all non-domestic buildings!

The BSI has included all the key air pollutants - particulate matter (PM2.5 and PM10), nitrogen dioxide (NO2), carbon monoxide (CO), ozone (O3), formaldehyde etc.

<https://knowledge.bsigroup.com/products/health-and-well-being-and-indoor-environmental-quality-in-buildings-health-and-well-being-in-non-domestic-buildings-code-of-practice/standard>

The 'Code of Practice' gives more 'points' for indoor air beating WHO air quality guidelines.

Clean Air in London has shown how the new standards can be met in buildings:

https://cleanair.london/app/uploads/CAL-499-Letter-to-DLUHC-re-buildings_140223-V4_edited.pdf

Researched IGEM's charter. Found that Individuals that join IGEM are required to sign a declaration agreeing to be bound by our [Professional Code of Conduct](#) **which places an obligation on members to act with integrity and in the public interest.**

23.01.23 Sir Peter Bottomley MP & Father of the House and member of APPCOG called a roundtable event at the House of Commons 'Improving CO safety in homes'. Stephanie Trotter seemed to be the only person representing victims/survivors/families and everyone else was industry, apart from four attendees from Policy Connect. Sam Graham from Cadent did talk about over 500 investigations for CO in homes of vulnerable customers. Wrote some rough notes on the train home. We received the official notes on 02.03.23.

Wrote to Rebecca Pickett of Ofgem about the VCMA (Vulnerability and Carbon Monoxide Allowance) funding – suggested that this funding could be used for the Fuel Bank Foundation? Or was it up to the GDNs?

25.01.23 CO-Gas Safety's 28th anniversary and report. We are now in our 29th year.

Reviewed comments made on Companies House website about keeping occupations of Directors and addresses from the public. Discussed the need to write to company directors after all else has failed or about an urgent safety issue. Recognised that some company directors are harassed. Law enforcement could apparently forward concerns to directors, but what if it's urgent? Used the ferry leaving harbour with bow doors open as an example (Herald of Free Enterprise). How would an ordinary person, convince the police or HSE to act at all, let alone quickly enough? Later suggested a compromise namely an automatic forwarding system that would protect anonymity in cases where this was necessary but guarantee and prove receipt.

Virtual meeting with Simon Birkett and Nicole Zandi – asked for some PQs* on CO and later sent them. Seems unlikely that the Clean Air (Human Rights) bill will go through Commons, but CO more promising. Indoor air is more concentrated, more controllable and testing for CO could save NHS funds and expertise could earn profit abroad. **Parliamentary Questions.*

February 2023

08.02.23 IGEM's Chris Bielby award.

Jonathan Kane won this on testing for CO. This was a huge step forward.

CO-Gas Safety had originally applied for this award with Jonathan Kane supporting.

Put Fuel Bank Foundation crisis report on our website.

Heard from Eileen Brown of NGN who kindly gave us permission to put 'Giving carbon monoxide nowhere to hide' on the website. It is now on the website. <https://www.co-gassafety.co.uk/giving-carbon-monoxide-nowhere-to-hide-by-northern-gas-networks/>

Worked on the submission to the All Party Parliamentary Committee on Health and Social Care and sent it.

Wrote to Ian McCluskey of IGEM about Unsafe Situations Procedure asking for feedback on our comments which were basically, **why does IGEM not recommend use of a flue gas analyser to test for CO 'whenever practicable'?**

09.02.23 Wrote to HSE's Caroline Lane a long letter on headed paper stating that **surely CO was a safety issue and if it was and HSE stated it was then Ofgem would find the funding to test the homes of all consumers.**

15.02.23 Gave an interview about CO to BBC South East at 12.30.

Wrote to Bob Seely MP about the Clean Air (Human Rights) Bill and stated that not one Conservative MP had signed not even the Conservatives who are members of APPCOG. *63 MPs signed 23.01.24.* <https://edm.parliament.uk/early-day-motion/60394/the-clean-air-human-rights-bill>

20.02.23 Media in USA about Oak Ridge development (filtering out the worst pollutants from a gas boiler similar to an exhaust on a car) so wrote to Gao Zhiming congratulating him on progress and reminding him about the need for a standard and a certificating body.

CORT talk at 2.00 p.m. by Stefania Oliverio. This was about testing the blood in a different way to COHB and was about total CO in the blood, TBCO and gas chromatography to Mass Spectrometry. It seems COHB only measures the CO bound to the haemoglobin - her method includes free CO.

22.02.23 Heard from Dr Mark Porter of The Times and wrote again to him again about lack of specific mandatory test for CO on landlord's safety check.

Re-sent email to Robin Smith of the Jersey Police about the 8 deaths from explosion in Jersey sent 22.12.22. <https://jersey.police.uk/about-us/command-team/chief-officer/> Sent Feb, May, July, Oct. & December but sadly still no response. Update 2024 – 9 deaths.

28.02.23 Meeting with Steve Long call about the 'exhaust' for the gas appliances re Zhiming – Oak Ridge USA. Sent an email asking him to write exactly what he does and to confirm that he represents 80% of the gas industry. Put need for a UL standard and a pass by a test house which could then make a lot of money.

March 2023

01.03.23 Heard from Steven Long (re Oak Ridge USA) re filtering pollutants from gas furnaces California Statewide Gas Emerging Technologies Program | California Energy Programs (cagastech.com) Visit the Propose an Idea page for more information and online submission form.

Wrote to Oliver Lancaster CEO of IGEM with Paul Overton's case study and saying surely with a deadly gas, IGEM should be leading and providing guidance to test for CO at every opportunity? If Oliver doesn't agree, why not? We'd like to know and discuss it.

Received notes of meeting at House of Commons chaired by Sir Peter Bottomley on the 23rd of January from Laura Fatah – notes lengthy. Stephanie worked hard on this and compared with her notes made at and after the meeting.

Policy 8.2 of the Gas Safe Register was not mentioned at all in the official notes.

<https://www.gassaferegister.co.uk/media/oszoobt0/consumer-policy-our-service-explained.pdf>

Inspector from GSR will not test for CO without the landlord's permission. Why not?

03.03.23 Wrote to Sarah Graham, health journalist who was on Woman's hour again and attached Chris Bielby award.

07.03.23 **Heard from CAB Suzanne Lonergan in Ipswich asking if we had a leaflet.** Wrote sending her our leaflet. Asked her if she knew anyone higher up in national office so we could help other CABs. Explained about proof and offered to write article about proof for CABs re CO.

09.03.23 Heard from Charon of NCOAA USA – her deadline is 05.04.23 for our document – Charon wants only the facts but told us that apparently these can be accessed via the Internet.

10.03.23 Wrote letter to the Times about prepayment meters.

13.03.23 Received an email from Dan Edwards of SGN, Chair of the CO GDN group. Seems that their FCOs 'make safe if they attend a property and suspect or visually confirm CO' If their Care & Repair team who are qualified under CMDDA1 to test for CO. **But the issue is, how can anyone tell if there is a CO issue without using equipment to test?**

14.03.23 Meeting with Ilsa Hausler of British Paediatric Surveillance Unit and explained the need to find children with proved CO and suggested two ways forward. Sent various documents. Really constructive meeting.

15.03.23 Wrote letter to the Times thanking paper for its success on pre-payment meters but asking for help for vulnerable customers.

Wrote to Prime Minister on a form about the Clean Air Bill and asked him to sign.

Wrote to Bob Seeley MP again about the same (had written 12.01.23)

Wrote to Laura Fatah about Parliament to investigate indoor air quality and said we wanted to contribute.

21.03.23 Wrote to Ilsa about the research done at St Georges Tooting and fact that we understood this research project had failed because proof of CO was not present.

23.03.23 Stephanie Trotter attended Air Quality Conference at which Baroness Jenny Jones spoke and Stephanie met her.

24.03.23 Wrote to Sharon Baker of Gi magazine with a press release about the Chris Bielby award – offered to write something more, e.g. why we thought testing was so vital.

Re EN 7967 – We think 6.2.2 needs updating as allows RGEs to be exposed to too much CO. Suggested use of breathing apparatus.

27.03.23 Heard from Charlotte Simmonds about the heating in the Houses of Parliament – we'd asked what sort of heating the Houses were going to have. Wrote back to Charlotte explaining our interest in safety and sustainability.

Wrote to Caroline Hooper of IPIP* after long talk and attached case studies, (Overton and Courtney and link to other case studies), numbers affected by CO in the UK and brief CV. Later sent CO alarm levels and our comments. Offered to help and told her about Ilsa. Partnership working through *Improving Performance in Practice** (iPiP) www.ipip.co.uk

Sent email to Caroline Hooper with corrected version of the interview I gave.

Resent email to Ian McCluskey about our comments on IGEM's technical standard IGEM/IG/1 Supplement 3 - Metering/Emergency Service Provider Natural Gas Training Specification.

30.03.23 Case study from Cadent's Dan Howard finally approved by all.

April 2023

04.04.23 Notified Laura Fatah of APPCOG that Jonathan Kane won the IGEM Chris Bielby award and attached a press release. Pointed out that this is significant, with regard to the testing for CO.

06.04.23 Wrote to Kevin Tse of Ofgem to ask for relevant Acts governing duties of Ofgem under FOI.

Charlotte Simmonds sent an email in response to our question about what heating system the Houses of Parliament are going to have – undecided apparently so we suggested electricity with tidal.

Wrote to BBC about their report of a CO alarm detecting a 'gas leak' in Cumbria – was it CO or gas? Which gas emergency service provider was it?

07.04.23 Wrote to Charon McNabb of NCOAA (USA) re <https://www.edp24.co.uk/news/23433041.norwich-pilot-john-hoytes-boost-toxic-cabin-air-battle/>

Wrote to Charon McNabb of NCOAA re the Clean Air Bill <https://bills.parliament.uk/bills/3161>

Wrote to Charon McNabb of NCOAA re the CPSC re the generators <https://theworldnews.net/us-news/u-s-advances-portable-generator-safety-rule-to-prevent-carbon-monoxide-poisoning>
[U.S. advances portable generator safety rule to prevent carbon monoxide poisoning](https://www.usnews.com/news/health/2023/04/07/us-advances-portable-generator-safety-rule-to-prevent-carbon-monoxide-poisoning)

Wrote response to Laura Fatah manager of Policy Connect for APPCOG re her nice email about the Chris Bielby award. Sent her the research by Northern Gas Networks 'Giving CO nowhere to hide', 2011-12.

Wrote to Laura Fatah re her response to our comments on four things left out of the notes of the meeting on 23.01.23.

08.04.23 Read report about the deaths of two divers on two separate dives in Kea in Greece – CO of 11% and 15% but said COD (cause of death) wasn't CO. CO2 could have been a COD. Sent report to Jenny and asked for email of Coroner in Hull. Senior Coroner Professor Paul Marks.

<https://www.hulldailymail.co.uk/news/hull-east-yorkshire-news/families-agonny-mystery-still-surrounds-8333532> Email coronersoffice@hullcc.gov.uk

Interesting because apparently 8% was enough for CO to be a COD for Zane Gbangbola, aged 7, who died in February 2014. The Coroner's verdict was in September 2016. The family disputes the finding and continues to maintain that Zane died of hydrogen cyanide from a flood from a landfill site. see <http://www.dailymail.co.uk/news/article-3794537/Justice-Zane-New-hope-parents-blamed-death-flood-tragedy-son-MP-attacks-seriously-flawed-inquest.html>

10.04.23 Sent the work group the Law, Practice and Prevention of Carbon Monoxide Poisoning in the UK plus the others sent it to. After receiving responses, sent to Charon McNabb of NCOAA.

13.04.23 Heard from Michelle Sweeney of the HSE that in the year 2021/22 HSE laid 7 charges with 5 successful convictions for breaches of Reg. 36 (3) (landlords' gas safety check & certificate). Average fine £45,500, highest £120,00 & lowest £4,500. HSE served 11 improvement notices re Reg. 36(3). <https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-headline-report/english-housing-survey-2021-to-2022-headline-report>

There were 8.6 million rented properties in England 2021-2022.

15.04.23 Stephanie Trotter attended the Guild of Master Chimney Sweeps annual AGM Gala dinner and congratulated the Guild & particularly Lawson Wight on creating the protocol to make sure the chimney is not swept, before a test of the air for CO has been done when CO suspected.

17.04.23 Wrote to Oliver Lancaster CEO of IGEM as suggested in response to email from Ian McCluskey but then added more.

Made some serious points namely: -

1. Testing for CO being done but only for vulnerable consumers when everyone is vulnerable to CO and
2. Although IGEM standards are made by consulting a committee, they are still labelled with an IGEM number so & so etc. so why wasn't IGEM leading from the front and advocating testing – Ian McCluskey was copied in.

18.04.23 **Stephanie Trotter attended the IGEM Gas Usage Conference sponsored by Kane International.**

Jonathan Kane talked about the need to test and measure for CO. Excellent talk. Met two HSE representatives including Caroline Lane.

Steve Critchlow, also HSE gave an excellent talk.

Someone from EU skills asked why not a competent list of Gas Engineers and in Stephanie's opinion, Steve more or less said that could be dangerous as we wouldn't have enough engineers. **We agree that he is probably right but all RGEs should be competent. Perhaps, if CMDDA1 was a compulsory qualification this would improve competence.**

New Builds were mentioned and the need for architects and quantity Surveyors to know about CO and not block flues.

Stephanie met Graham Savage, who told her he recalled an IGEM event at Loughborough in the late 1990s and she had given a talk. He recalled it made a big impact. He had also come to the Isle of Wight for our sponsored walk. He said he had a firm and could help us with testing for CO.

When Stephanie got home, she found the talk she'd given in 1998 based on a real case of a young couple. The man had died from CO and the woman had been so severely brain damaged that, although she was walking and talking and looked fine, she could no longer work creatively as she had done. Stephanie had gone through all the bodies that should have helped but did not. According to Graham Savage, Chris Bielby had been there at the time and afterwards got them all together and said they must do something. This was the first Stephanie had heard of this from anyone.

21.04.23 Emailed Kevin Tse of Ofgem to ask him to please send email to Ofgem's lawyers – need to know sections and acts. Ofgem's duties are to protect members of the public from use of gas through pipes. Surely all customers need tests for CO whenever practicable? Copied Caroline Lane HSE.

25.04.23 NGN virtual meeting. 9.45 to 1.00 p.m.

Wrote to survivor who had written to everybody about need to make changes. Wrote an email with suggestions, e.g. bring back the prize giving for the raising awareness of CO event to the Houses of Parliament

Wrote to Bob Seely MP asking him to sign the EDM for Clean Air (Human Rights) Bill.

26.04.23 Sent suggestions for improved publicity to Dan Edwards SGN, Chair of the GDN CO Group, including First News and Post card drops and event at the Houses of Parliament to increase entries.

Sent email to Oliver Lancaster about IGEM/IG/1 Supplement 3. Argued IGEM's Charter was on our side. Also, wrote re the technical document that governed the committee deciding this.

27.04.23 Survivor MS alerted us to research from CPSC (USA) on generators etc. re CO.

Dan Edwards from SGN wrote and it seems there is nothing the GDNs can or will do with regard to the CO awareness competition.

May 2023

Noticed media alert by RGM a firm of Registered Gas Engineers, Graeme Robertson.

Concerned about people not being able to afford servicing. RGM is offering some free servicing.

Could APPCOG and the Gas Safe Register suggest this to other firms? Concerned that these decent firms will be ripped off by people who can well afford servicing. Stephanie wrote to suggest asking midwives and health visitors for recommendations.

June 2023

CORT conference 14.06.23.

Stephanie Trotter attended along with Avril and Gordon Samuel of the Katie Haines Memorial Trust.

20.06.23 First contacted by father of a man, Lewis Dunton, who died of a BBQ abroad in 2005. The father found that his local BBQ fuel firm in Dorset was selling fuel without warnings. Did some research – contacted Trading Standards – clearly in breach but will not act, at least not at the moment. We are not satisfied with this lack of action by Trading Standards. Trading Standards did assure us, that it had explained in writing that if someone died as a direct result of using the fuel indoors without a warning, they could be charged with manslaughter by gross negligence. However, we have not seen this email. This response was also after we'd pointed this out to Trading Standards. Update 03.11.23 After an email sent 02.11.23 received response that 'the packaging would be amended to include a suitable warning next year when charcoal sales recommence.'

Please note Lewis Dunton's father also tried APPCOG, but with no success.

Please note CO-Gas Safety seems to be the only organisation to offer specific help and advice on CO and this sort of issue to survivors and families.

22.06.23 Paul Overton and Stephanie Trotter attended with Jonathan Kane to attend a demo and presentation by Cadent's Wayne Merry and met several engineers. Discussed unsafe situations procedure by IGEM and what to do when a CO alarm sounds. Excellent day and engineers all keen to test for CO.

25.06.23 Media alert that army families do not have gas safety certificates.

<https://www.forces.net/military-life/families/nearly-800-military-homes-found-be-without-valid-gas-safety-certificate>

July 2023

11.07.23 IGEM meeting

Paul Overton and Stephanie Trotter attended meeting with Oliver Lancaster CEO, Ian McCluskey Head of Technical and Policy also with Jonathan Kane of Kane International. Discussed the unsafe situations procedure and what to do when a CO alarm sounds.

We asked why is everything (including using human senses!) except a test for CO suggested? Discussed testing by Cadent and NGN. Also, SGN (uses a third party). Why not testing for CO 'whenever practicable'?

August 2023

01.08.23 **Clean Air Bill seems no Conservatives have signed, not even those on APPCOG and nor Barry Sheerman MP (Labour).**

02.08.23 Worked on and then sent the letter to Kevin Tse, Rebecca Pickett, (Ofgem) Sarah Newton and Sarah Albon (HSE) about MOU and safety issues. **Hopefully made the case that testing for CO is a safety issue and so HSE and Ofgem should discuss it and take action.**

11.08.23 We were contacted up by a concerned person KH who was worried about risk of explosion due to invasion by tree roots. Could squeeze a gas pipe causing a build-up and explosion. She was a risk assessor. Interesting case. MP is Ian Duncan-Smith.

Logged into RHS website and asked what trees are suitable for pavements – which ones with tap roots – explained possible danger of pinching plastic gas pipes leading to an explosion. Apparently 41 gas explosions since 2020. Told KH about Adam Forrest Independent journalist who had contacted us some time ago about explosions. Update. Heard in November that Cadent has a good guidance document about this and sent KH the link to it.

16.08.23 **Wrote to Woman's Hour re Listener's week and suggested CO covered soon.**

17.08.23 **Heard from Pierre Chays in Jersey and finally his boat is in the water. Willing to film and test. Made the point that we need PPM of CO on the floating quays.**

Submitted CO-Gas Safety's opinions to the VCMA consultation.

18.08.23 To our surprise, CO-Gas Safety was asked by Centrica for training centres for investigations into gas incidents. Roland Johns responded with SGas. We sent this suggestion on to Centrica. Also wrote to Stephen Critchlow of HSE. Centrica is going to ask EU Skills if they would help set up a good course for gas expert court witnesses.

22.08.23 Read a report about over 20 people were affected by CO in a refugee camp. Wrote to Innocent Magambi info@inuaadvocacy.org about CO in refugee camps and asked if he had any contacts with the UN.

Received answer from HSE re a FOI request about the number of investigators and their qualifications. There are two.

13 investigations into carbon monoxide (CO) and gas incidents were started by HSE in England & Wales in 2022/23 – 9 related to suspected Carbon Monoxide poisoning

29.08.23 Virtual meeting with Stoke College re Gas Safety week and CO Awareness week. The college wanted to feature death of Matthew Nixon, Registered Gas Engineer aged 22. He was a registered gas engineer for 6 years who died of CO in 2010 while using a petrol generator to power his tools. Matthew's sister willing to help.

We recommended to APPCOG that they ask Wayne Merry of Cadent to give the presentation he gave us to the next APPCOG meeting and also at the next COMED meeting.

Wayne Merry of Cadent gave CO-Gas Safety permission to share his slides with HSE.

Sent an email to all the victims I have emails for about the ME Association and update on GDNs testing.

Heard from Avril Samuels that sadly they don't want to be involved in a revival of a victim group under APPCOG.

September 2023

02.09.23 Wrote to Charon of NCOAA in USA to report that fire fighters at APPCOG virtual meeting said the event in the USA was a huge success and there was possible funding from CPSC. Congratulated her.

Queried why report by Liz Twist MP Prepare, Practice & Protect did not mention testing for CO – only mentioned monitors, which were dismissed as too expensive. But we found one that was about £84.00. Gaelan Komen kindly said he would raise it with Cadent.

Sent material to Gaelan Komen. Suggested he sought help from Adrian McConnell and talked to Tom Woolley. Much discussion by email about what should be done re CO.

Heard from Jess Mills, a researcher for BBC Morning Life. A great deal of time taken up providing background information and case studies. BBC seemed to want only one situation, namely a tenant who did not have a gas safety certificate and had had proved CO. But lack of testing means no proved CO.

06.09.23 Received Graeme Robertson's press release re free servicing by RGM and sent to APPCOG and Sarah Hill of GSR to ask if other firms would do the same.

11.09.23 Received invitation to make submission to UKEIC about CO and vulnerable customers so re-sent previous submission <https://hub.ukeic.com/proposal/2332> making the point that Cadent, NGN and SGN actually doing this now and we could help further.

Case study of Fred Jackson Philips from CO now on our website on his birthday – 12.09.23.

Survivor MS re sub-acute vertigo and hearing loss through low levels of CO – estimated 25,000 UK residents affected. Emailed to say we hadn't heard of this but only estimated – no proof of CO so perhaps tends to be ignored.

Supported free webinars about CO by the Gas Safe Charity.

22.09.23 Sent consultation to Graeme Kelly of Ofgem re smart metering.

Wrote to Holly.Topley-Brown@hullcc.gov.uk re two diving cases in Greece and asked if our details could be passed on to the families. Attached the New Zealand diving case.

Received email from Coroner's officer re Timothy Saville the diver – sent inquest report to Jenny. 15% carboxyhaemoglobin and 11% for the other diver not enough to be CO as cause of death.

23.09.23 Heard from the landlord of our Air B & B in Victoria, Canada when visiting relative. Wrote to him about his gas cooker and CO alarm as, although he had one, there was no number, date, standard or manufacturer on it. Stephanie told him that two of her relatives in Canada had had recent CO alarms from their gas cookers.

24.09.23 Wrote to UNRA (United Nations Refugee Agency) re Article '23 escape carbon monoxide poisoning death in Dzaleka Camp' 22.08.23 <https://www.maravipost.com/23-escape-carbon-monoxide-poisoning-death-in-dzaleka-camp/>

26.09.23 Emailed Wayne asking if we could send his excellent presentation to everyone and anyone without asking each time. He responded that we could.

Re-sent email sent in July to Caroline Lane HSE suggesting that if GSR was up for relicensing HSE could require the GSR make it easy to obtain the services of a Gas Safe Registered Engineer with CMDDA1, so he/she could test for CO & provide PPM of CO to survivor and medics.

27.09.23 Wrote to Michael Tomlinson MP to congratulate him on his publicity re his brother Edward, who had died abroad of CO, and ask him to help us with HSE. Then rang up and spoke to Laura at his office so our email wouldn't be rejected as a non-constituent. Heather and Howard (parents) are both well. Included Wayne's presentation in my email to Michael Tomlinson MP.

Heard from new survivor Rachel Brady. Cadent had found 50 PPM of CO. Willing to do a case study and praised Cadent highly. She gave permission for emails to be sent to Jennifer Wood our database officer.

October

Asked Adrian McConnell to see if he could help make the JMLU research public. This research was funded by CORT, (or it may have been called the Gas Safety Trust or the CORGI Trust at the time).

Wrote to Kevin Tse of Ofgem about an Ofgem update re data. Asked if Ofgem received any data from the GDNs, particularly Cadent re the testing for CO?

November

A very busy month. Looking through the notes, time was spent trying to attend meetings we were not invited to, e.g. COMED and APPCOG. Some of these efforts were successful some not, e.g. COMED (Medical Group under APPCOG) meetings, yet there seems to be nobody to represent survivors.

Many emails written asking for protocols e.g. if CO found was survivor given the PPM of CO? We were delighted to learn that it was at least from Cadent. We asked for introductions to bodies etc. Many emails ignored. Increase in new survivors and relatives asking us for help.

01.11.23 Report about the Thomas Hill death in 2015.

<https://www.dailymail.co.uk/news/article-12693681/student-death-carbon-monoxide-poisoning-avoidable.html>

Fine of £120,000 for this avoidable death from the Sheriff in a Fatal Accident Inquiry.

CO alarm sounded three times leading up to the death of Thomas Hill.

Need for servicing and instruction manuals. Also, no movement of portable heaters.

Wrote to Jerry Hill, Thomas' father.

COMED (medical group under APPCOG) meeting but sadly we were not invited, As far as we know nobody was present to represent survivors/victims/families.

06.11.23 Heard news about Ofgem's increase in VCMA funding from £60 million to £171 million.

07.11.23 Attended the ADI webinar. Alzheimer's Disease International at 1.00. Had written earlier to ask if the meeting could mention the need to prevent CO and how to do this.

08.11.23 Health and Social Care Committee Sandy Gill responded with reference to witnesses

<https://committees.parliament.uk/oralevidence/13597/pdf/>

Responded with point that all customers need to have homes and appliances tested for CO.

10.11.23 Wayne Merry of Cadent convinced data is the answer and we agreed. Sent Wayne NGN's research, 'Giving Carbon Monoxide nowhere to hide' which showed testing could be done in 5-7 minutes (from a trial undertaken in 2011-12).

14.11.23 APPCOG stakeholder meeting.

Tom Woolley sadly ill. Went to the room P and it was very small. Not many people. Suzanne Callington and Wayne from Cadent. Mike Jones from Stoke College. Avril and Gordon and Rob Lyons. Wayne gave his presentation which was very good. Stephanie said a few words about the need to test for CO – then Paul which was about the effect CO had on the whole family. It was very sad. Suzanne Callington said the prizegiving at the Houses of Parliament had withered on the vine because the parents did not want the expense of attending. Stephanie informed the meeting that CO-Gas Safety had always paid expenses, so surely the GDNs could, especially as it had generous funding from the UIOLI fund from Ofgem? **Stephanie also asked how FCOs can decide whether or not to investigate for CO, without first testing for CO using the sweep test?**

Corresponded with Frank Brehany about trying to find victim groups in Europe.

15.11.23 Sent Gaelan Komen the Renters Reform Bill alert and asked if the landlord's gas safety check and certificate could be clarified/changed in this bill.

18.11.23 Wrote to Gaelan re good news from W & W now training 12 engineers for CMDDA1 so now all four GDNs are testing or preparing to test for CO. Queried how data would be processed. After thinking a university would be needed was informed that a company SIA was collecting all GDN data including CO data. Possibly a statistician might be needed.

Queried that it was surely time to change Algorithm for GPs? Suggested Hilary Wareing would help. Sent Algorithm for GPs and one for midwives and other health professionals.

19.11.23 Heard about the roundtable with Liz Twist MP 07.12.23 – seems we won't be asked to attend in person. Will anyone be there from survivors/victims/families?

23.11.23 Wrote to CPSC (Consumer Product Safety Commission) in USA re recall after repairs to gas ranges didn't seem to work <https://www.cbsnews.com/news/zline-recall-gas-ranges-carbon-monoxide-unsuccessful-repairs/> – sent Rachel Brady's case study – pointed out if no test for CO, Rachel would still be being exposed to CO.

Wrote to IGEM, Oliver Lancaster and Ian McCluskey suggesting changes to Unsafe Situations procedure and GEL 11 re CO alarm sounding.

24.11.23 Wrote to Bob Neill MP re stroke – his wife had just suffered a stroke and wanted him to know that CO can cause stroke, for his sake and for the sake of his wife.

Wrote to Kevin Tse of Ofgem about increased funding from £60 million to £171 million.

26.11.23 Wrote to Gaelan re meeting 07.12.23 and saying somebody should attend in person on behalf of victims/survivors/families. Why no PAMs (Personal Alarm Monitors for CO)?

28.11.23 Meeting with IGEM. Had sent Wayne's presentation and Rachel Brady's case study. Prepared agenda and sent it. Meeting at 2.00 with Oliver Lancaster, CEO, Ian McCluskey Head of Technical and Policy, Stephanie Trotter CO-Gas Safety and Jonathan Kane of Kane International and Sue Westwood, CO-Gas Safety also joined.

All four GDNs now testing albeit vulnerable customers only but it's brilliant because data now being compiled. Data so far convincing of the need to test for CO - Cadent showing one third of 600 tested were A/R (At Risk) or I/D (Immediately Dangerous). Need for IGEM's support on testing. Ian convinced – not sure Oliver is. Discussion about Energy UK brought up by Ollie. He thought they'd be helpful. Stephanie thought it would be great if IGEM could get Energy UK on board but doubted it.

Wrote to Rachel Brady asking how she is and saying that we used her case study again today and how helpful it was.

29.11.23 Sent notes of IGEM meeting to attendees.

Wrote to Ian McCluskey suggesting it was surely right that test for CO be recommended whenever practicable. Surely time IGEM led on this issue?

30.11.23 Sent work group email re petition re Clean Air Bill – Government response is late. Sent email to Simon Birkett of Clean Air London, asked after Rosamund Adoo Kissi Debrah and gave him the good news i.e. that all four of the Gas Distribution Network companies (GDNs) that provide the gas emergency service are now testing for CO or training Registered Gas Safe Engineers to do so. But only for homes of 'vulnerable customers' under Ofgem's UIOLI (Use It Or Lose It) funding scheme.

The GDNs seem to be left to decide who is vulnerable and so far, generally interpreting this as those on or eligible for the Priority Services Register (PSR), the sick, elderly, poor, disabled, those with young children or living in remote rural areas.

But of course, all customers are vulnerable to carbon monoxide (CO) however healthy, wealthy or wise.

Re-sent email to Caroline Lane and HSE gas enquiries about was the GSR coming up for renewal and if so could HSE insist that HSE make it easy to find RGEs with CMDDA1.

December

Wrote to Adrian McConnell re JMLU research and asked if report he had sent us was published yet? In any case report didn't seem to be the research that supported the press release which showed 20% of homes had 50 PPM and above of CO.

06.12.23 As requested sent Gaelan 'Needed Safety Improvements'. Wrote later to say that we would be happy to work on the legislation and what needed to be changed to implement the improvements, but we are too busy, at the moment.

07.12.23 APPCOG meeting Report 'Prepare, Practice & Protect' 'Improving CO safety in Health & Care Services' written by Laura Fatah and published in July 2023. Stephanie Trotter attended. Becky Walker said the Local Authorities had powers to deal with private landlords which they do but said Environmental Health Officers (EHOs) could get RGEs to test. Stephanie wrote a note to say – yes, could get RGEs to service but doubted they would test for CO. Liz Twist MP said the issue how to raise CO and warn people? Stephanie wrote 'find it and prove it'. Showed this note to Dan who nodded – then showed it to Liz Twist MP who quoted it at the meeting.

On the way out, Stephanie had a discussion with Dan Edwards of SGN and said main problem was lack of gas engineers to test and all needed CMDDA1 training. Dan agreed CMDDA1 should be part of the core for RGEs, all the companies were using a company SIA to process the data and were all collecting same way.

Stephanie suggested seeing HSE – if HSE said testing was safety issue then Ofgem would find funding. Dan said HSE not interested. Stephanie suggested we needed to all get together and then we would see Minister for HSE.

12.12.23 A lot of correspondence with survivor, DD as usual about finding some gadget to test the air. Asked Dr Ben Croxford for help and he suggested <https://markes.com/> Asked if UCL could analyse.

Re-sent email to HSE re cross departmental meeting – has it been held? Minutes? Is it still to be held?

13.12.23 Wrote to Wayne Merry saying sorry about the Chris Bielby award (he's not eligible due to Cadent being a judge) but will look for other awards he could enter.

Concerned about Methodist Minister RH's cooker. I rang the gas emergency number today 0800111999 and got an amazingly helpful person called Ryan who gave his identity number and he said the gas emergency service does attend bottled gas incidents, if CO suspected or CO alarm alarms. He was very knowledgeable, and the training is now far better. The call handlers (or at least Ryan) seem to know the levels that CO alarms sound now which is brilliant.

Wrote to Gaelan Komen about his promise to bring up use of pulse oximeters with COMED and also Algorithm and GPs working with GDNs.

14.12.23 Ofgem responded to our FOI request which was interesting and as expected but the question about whether or not Ofgem had consulted HSE was so obscure, we queried this. We received a response immediately that **Ofgem hadn't consulted HSE over VCMA or the extra amount but had enabled it to react.**

Sent to Work group with query what to do about this. One responded to my suggestion that we refer this to APPCOG. (Wrote to Gaelan Komen about this on 10.01.24.).

Rang James Gray MP, who is the MP of the Methodist Minister RH and spoke to Oscar – very helpful. Told him another clergyman, this time C of E had alleged much the same. Our email has been received and will be dealt with.

Suggested to Wayne that he might like to apply for the Gas industry Awards.

Emailed Women's Utility Network asking if they wanted to know about CO.

15.12.23 Wrote to Wayne – replied that Gas Industry Awards for next year would be good – Stephanie and CO-Gas Safety will have done 30 years by next year.

Email from Sarah Hill re ours sent 14.09.23 to her. 'One in every five UK homes contain potentially dangerous gas appliances'. In our opinion it would be far more effective if gas appliances were turned on and the air and emissions from gas appliances tested for gas leaks and for CO. Then we would know for certain how many UK homes have proved dangerous gas appliances.

Would Gas Safe Register support this? Sarah Hill's answer was that legislation would be required. We found this very disappointing.

16.12.23 Phoned new survivors RB and D on the way. Had conversation. They had LPG boiler next door – were suffering CO symptoms. Cadent had called twice and one Cadent CO alarm had alarmed since. Told them to ring again and report this but RB later told me Cadent wouldn't visit again. They sent case study – 10 pages long, full of praise for Cadent. Read at midnight, responded at 12.50 a.m.

Sue Westwood, wrote to inform us about a Facebook#Sleep advocating a tent on the back of a truck enveloping the exhaust and telling people to keep engine on to keep warm. Sue told me plenty of people had warned about CO. Tried to find it once I was home but couldn't find it. Emailed Sue.

17.12.23 Sue sent email saying she had messaged Gerald Butler re lorry.

18.12.23 Started the day with concern for the two men RB and D. Rang Cadent and got Ruhul Miah who was fantastically helpful. He got the address from the name and the mobile number thank goodness and said he had send a Cadent engineer within an hour. Later heard from one of the men – that one aged 60 detained in hospital with injuries consistent with CO and that CO had been found in both their house and the one next door with the LPG boiler. Sent Phil Burrows, Suzanne Callington and Wayne Merry of Cadent an email of thanks.

Suzanne Callington of Cadent wrote in response to an email some time ago and thanked us for Rachel Brady case study. However, Suzanne said there was a long road to improving the gaps.

Wrote to Kevin Hegarty and Ben Green of Cadent re recent case of the two men and expressed hope that Ruhul Miah would be thanked - also the FCOs.

Rang Cadent Customer Care 0800 389 8000 and got Rea of the Disconnection Team (there is no comments team) and expressed the same re Ruhul Miah and FCOs. She will relay up.

19.12.23 Wrote to Jim Lambeth about HETAS – presume HETAS would charge. Received acknowledgement and thanks from Barakak Mutavakil from Cadent and made suggestions about how positive feedback could be asked for and given – maybe on website. Also, employee of the month and then year in a competition with a reward.

20.12.23 Wrote to Suzanne of Cadent about her comment about there still being gaps – that we agreed and mentioned COMED and the article in the Times, 'Doctors should listen to patients'.

Attached Rachel Brady's case study. Mentioned Algorithm and cul de sac for GPs due to no access to testing the home for CO. Also, HSE needing to say testing was a safety issue then Ofgem would provide funds for tests whenever practicable. Also, landlord's gas safety check should require test for CO – attached our NLJ article 2018.

Wrote to Gaelan Komen re COMED and articles on pulse oximetry case studies Amber Yates, Rebecca Scarlett etc. Also, surely we should attend COMED as we represented survivors/patients?

Wrote to Steven Yurek of AHRI (Air Conditioning, Heating, and Refrigeration Institute) USA re the Zline cookers unsuccessful recall and suggestion for appliance logbook.

Heard from Care from Cadent and they are passing on Stephanie's suggestions which is good.

Re-sent Dr Charles Shepherd re ME Association – surely PM on brains can include test for CO?

Heard from Sue Bartley from HSE gas enquiries – was told not to copy named person in as well as write only to HSE Gas enquiries.

21.12.23 Sent email to Cadent's Mary O'Shaughnessy re use of our case studies. Sent usual rules but suggested we had a chat in the hope we could work together. Got positive reply and ended up suggesting 4th January. Found out through Linked in that Mary is a Project Manager.

Received email from Dr Charles Shepherd of ME Association re my suggestion to test blood for CO while looking at brains at PM. He gave reasons for not doing this automatically, such as suicide. Replied that as he was surely aware CO makes people depressed, so CO could be a contributing cause. Baroness Finlay recommended testing at every PM in 2012. Sent him Press release from JMLU in 2012 and also 'Numbers affected by CO in UK' – 20% of households above 50 PPM. Asked him to read these.

Received minutes of 07.12.23 APPCOG Liz Twist MP meeting from Lavanya and of all my contribution, only one was mentioned suggesting PAMs for CO for health workers. Still worth the meeting for chat with various people there, particularly Dan Edwards of SGN, Chair of GDN CO Group.

22.12.23 Sent Work Group the minutes of the APPCOG round table 07.12.23 and December update.

Sent leaflet and CO alarm levels and Beth Cheshire's research to Victoria Jackson of Institute of Health visitors.

Wrote briefly to Mary O'Shaughnessy of Cadent re virtual meeting on the 4th of January. Sent reading material – Press release, Numbers affected by CO in UK and 1/5 homes in UK don't have a safety check.

23.12.23 Wrote to survivor Paulin Morgan about her pointing out need to be able to demand a test for CO. We agree.

26.12.23 Sent email sent re COMED to Gaelan Komen on 26.10.23. Issue is whether or not there is anyone to represent survivors/victims/patients of CO poisoning at these COMED meetings.

27.12.23 Wrote to Kevin Tse re-sending an email first sent 22.10.23 thanking Ofgem for what it has done but saying that everyone is vulnerable to CO and copying this to HSE. Also attached Wayne Merry's presentation, his cooker data and Rachel Brady's case study, link to Zline cookers in the USA. Also asked who is the HSE's representative at the cross-departmental committee on CO.

Re-read draft email to Mary O'Shaughnessy of Cadent and sent it. Contained a great deal of reading material. JMLU press release, numbers affected by CO in UK and Beth Cheshire's research also references to our case studies. Meeting 4th Jan.

Heard from Kevin Tse of Ofgem and the FOI team and thanked him for forwarding to HSE and agreeing that it was an HSE issue.

28.12.23 Received update from Ofgem re a fund controlled by the Energy Saving Trust which seems huge and could surely pay for checks and servicing for Fuel Bank Foundation and maybe an organisation like ours.

29.12.23 Heard from Sue Westwood that Coronation Street is running a CO story very soon. Wrote to Kevin Hegarty and Ben Green of Cadent to ask them if the story is from Cadent. Hope it is and hope they've involved engineers.

30.12.23 Checked the media alerts and sent Jenny the interesting generator case in USA. Generator outside but near the garage door – fumes went inside. Couple affected but not killed and keen to raise awareness.

Also, a USA ice rink case – CO alarms went off days before many people went to hospital. Drafted email about both USA cases to Charon of NCOAA.

