

CO-Gas Safety Unintentional Carbon Monoxide Poisoning Case Study

DAN HOWARD, Rescued survivors in 2021



Dan Howard

Age: 30

Fuel: Mains gas

Appliance & Location: Central heating boilers in victims' homes

Notes by CO-Gas Safety: Dan Howard is a gas engineer and a First Call Operative employed by Cadent, one of the four companies that make up the National Gas Emergency Service. As part of his job, he rescued two victims from carbon monoxide poisoning in separate incidents within 48 hours of each other. He has kindly shared his experience with us here.

I have worked for Cadent for nine years. Cadent is the regional gas network provider for a large part of England that ranges from the north west, across to the east and down to North London. My job involves responding to calls made by the public to the National Gas Emergency Service in my area, which is Merseyside. This 24/7 service is free to call on 0800 111 999 and is for anyone who suspects either a gas leak or carbon monoxide issue (please see <https://cadentgas.com/emergencies/suspect-carbon-monoxide>).

First incident was averted by chance

On Christmas Eve 2021, I responded to a call from a gentleman who had been reading through a leaflet and recognised he had some symptoms of carbon monoxide poisoning. He lived in an upstairs flat. When I arrived, I turned the gas off and completed all my checks. The customer was in his front room, slurring his words and feeling very lethargic.

It didn't look good. He told me there was a boiler in the kitchen, where the door was closed (which may have slowed the spread of the toxic fumes into the front room a little). I used my kit to check around the edges of the door and the CO readings started to rise dramatically. I opened all the windows and told the customer we had to get out, by hell or high water we had to get out. He said he couldn't move – so I put him over my shoulder and got him outside. It was later confirmed by medics that he had high levels of CO in his blood, which often impairs a victim's ability to move.

Unfortunately, his home didn't have any carbon monoxide detectors to alert him to the danger – it is so lucky that he had read about the symptoms of CO poisoning and contacted us when he did. I learned later that he was in intensive care for days and if he'd stayed in the house for just a few more hours he would most likely have died.

A second incident averted by an alarm

Just two days later, on Boxing Day, I had another incident to attend. A family had celebrated Christmas Day together and one of the women complained of feeling unwell. The family visited to check on her the next day after putting her to bed to "sleep it off". They noticed the carbon monoxide alarm had activated. It had been sounding but the victim thought that it was simply faulty.

When I got there, I again isolated the gas and ventilated the property by opening windows and doors. I could see the customer had lots of tell-tale symptoms – red eyes, red face, things like that. What can catch you out is that the symptoms are a lot like a hangover. I immediately rang for an ambulance and informed them of the severity of the situation, due to the CO readings I was seeing throughout the property.

I assisted the customer to a safe place and waited for the paramedics. Three incident support units arrived very quickly and she was taken to hospital. My gas monitor had read 50ppm (parts per million) of CO, which would trigger an audio alarm if detected for a sustained time and is certainly high enough to cause symptoms and possibly even long-term health issues.

I couldn't believe it – less than 48 hours from carrying a fella over my shoulder, down the stairs, to get him outside, I was at another incident where I had to do almost the same thing. It never ceases to amaze me that people don't get an annual gas service, and don't always install CO alarms. I know times are hard, but this isn't something that's worth taking a risk about.

CO-Gas Safety comments

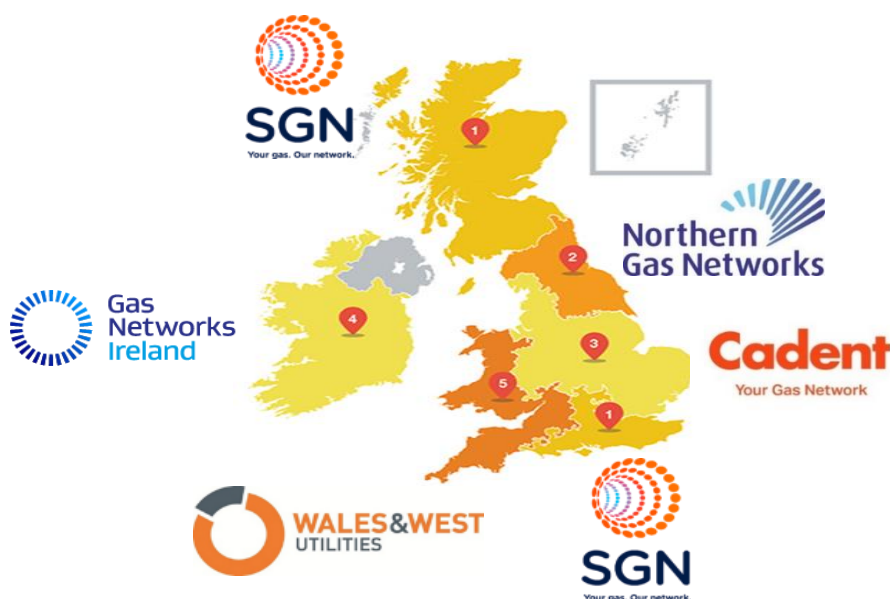
Cadent have confirmed that both incidents were traced to defects with boilers. Both of these incidents could easily have caused deaths, as the CO concentrations would have continued to rise.

If the first gentleman had not happened to read the leaflet, he probably wouldn't have realised the significance of his symptoms. If his boiler fault had not been identified then the CO it was releasing could even have seeped into the adjoining flat(s), including the one below his, and thus had consequences for other residents too.

If the family of the second victim had not visited her at home on Boxing Day then it is likely she would have slept and not even been aware of the CO alarm trying to alert her to the danger.

We cannot emphasise enough the importance of Cadent's advice – "Book a Gas Safe registered engineer to carry out your service, and pick up a CO alarm – or alarms – for as little as £15 from many retailers. It could save your life, or your family."

CO-Gas Safety recommends buying an audio alarm, or alarms, for all properties that include a fuel-burning appliance of *any* kind (not a black spot detector card, which will only show you the presence of CO if you remember to look at it, assuming you are not already asleep or unconscious). Please buy an alarm direct from a reputable retailer and ensure that it complies with standard EN50291. Remember to position it according to the manufacturer's instructions and activate it by either wiring it into mains power or by inserting fresh batteries (or removing a tab to connect the batteries it is supplied with). Without power the alarm is a useless device. Always consult the instructions to see the life of the alarm and record the date that you need to replace it, on the alarm itself if possible. Be aware that a CO alarm will not sound at 'low' levels that could still cause injury over time.



If you smell gas or suspect carbon monoxide, call the National Gas Emergency Service immediately on **0800 111 999**