CO-Gas Safety Unintentional Carbon Monoxide Poisoning Case Study

ANONYMOUS, Survived in 2021

Fuel: Mains gas

Appliance & Location: Rayburn stove in their own home

Notes by CO-Gas Safety: When a couple returned home and suspected a gas problem, the Gas Emergency Service were called. They assessed the three gas appliances in the property and disconnected the gas supply without giving any indication which of them may have been at fault or leaving any alternative means of cooking or hot water provision.

A stove similar to this one was found to be at fault

In November 2021 a couple living on the Isle of Wight came home from a morning out to discover a petrol-like smell indoors. They had several battery-powered carbon monoxide alarms in the home, to EN50291 standard, which were sounding. There were two gas boilers in the property, as well as a gas-powered Rayburn stove, which was around 28 years old.

Luckily, they knew what to do

The couple had had a similar incident around a year earlier and knew that the safe course of action was to call the Fire & Rescue Service. When they arrived and spoke to the homeowners, the Fire & Rescue Service then also requested that an ambulance attend, and they told the couple that the CO reading in the house was around 56. This is probably 56 parts per million. The WHO guidelines for 24 hours are 4 parts per million. As a result, the Fire & Rescue Service summoned the Gas Emergency Service (in their area, this is the responsibility of Southern Gas Networks, SGN).

Gas supply was disconnected

An SGN engineer assessed the situation and gave the homeowners a Safety Warning notice. This stated that the two boilers and Rayburn were considered unsafe. The outside gas meters were deactivated with sealing discs. As is unfortunately standard practice by the Emergency Gas Service, there was no attempt to test any of the three gas appliances. If they had been tested, and any with faults identified, then any remaining appliances could have been reactivated safely. Instead, the homeowners were just told to find a gas engineer to check each appliance and reinstate them. They were left with four electric heaters, as the house had no other means of generating heat, but until they could find a Gas Safe Registered engineer they had no hot water or cooking appliance.

Better safe than sorry

The ambulance lacked the necessary breath testing equipment to check for CO exposure so the couple were persuaded to go to hospital for some blood tests. These were done, blood was taken from the end of a finger and they were told they were ‘fine’. Their own registered engineer was able to come a day or two later and service both boilers, although no reason for a fault on the stove was discovered. However, the couple have decided to have it adapted to run on electricity.

CO-Gas Safety comments

We are currently lobbying for the protocol of the Gas Emergency Service to be changed to include testing of appliances during their visit, so that the CO risk is specifically identified *and* quantified. This allows non-faulty appliances to be reactivated (preventing occupiers from doing this with unsafe devices they need) and it would also give victims proof to show to medics, landlords and relevant tradespeople. There are also rare occasions where the fault is not actually within the property, but CO is coming from outside or from an adjoining property, which may continue to pose a threat.