## CO-Gas Safety Unintentional Carbon Monoxide Poisoning Case Study

## MATTHEW NIXON, Deceased in 2010



**Matthew Nixon** 

Age: 22 Fuel: Petrol

Appliance & Location: Portable generator used while working Notes by CO-Gas Safety: Matthew was a Gas Safe Registered installer who was using a petrol-powered portable generator in an enclosed space while working in a vacant flat. This fatality made it clear to CO-Gas Safety that even those trained in working with gas may not be sufficiently aware of the dangers of CO from gas and other fuels, and that both more training and more equipment were needed.

As a result of offering support to his mother, Stephanie Trotter learned that Matthew had been in the gas industry since he left school at the age of 16. He was qualified and registered with the Gas Safe Register. In December 2010, Matthew was working alone in a vacant flat. When neither his family nor his employer had been able to contact him all day, a colleague went to the flat and discovered Matthew collapsed behind a closed door. He was pronounced dead at the scene.

## Underestimate of the danger of CO

There was no electrical power at the property and so Matthew had been using a hired petrol generator when he needed to use his tools to install a new central heating system. Both smoke and carbon monoxide alarms had been fitted at the property recently and, although Matthew was aware of CO and had seen the alarm flash a warning light while the fitter was installing it, he considered the risk low as he was using the generator in small bursts. His post mortem report showed that his blood had a level of 80% carboxyhaemoglobin (the indicator of CO poisoning). This is extremely high – 50% is often quoted by pathologists as a fatal level, but it can be lower than that.

## **CO-Gas Safety comment**

Stephanie Trotter, President & Director of CO-Gas Safety, had suspected for some years that some registered gas installers did not fully understand the combustion process and that the training they received only covered gas, not other fuels. Her concern lead to working with Roland Johns to create a course on CO, which won the *H* & *V News* 'Safety Initiative of the Year 2017' prize for the charity.



**Roland Johns** 

Roland was the perfect person to undertake this work as he was a retired investigator and trainer from British Gas. He very kindly offered to help and John O'Leary generously supplied more pictures. The course covers the dangers of CO produced by <u>all</u> fuels, and has now been taught to apprentices and some staff from Scotia Gas Networks and Northern Gas Networks. Tom Bell of Northern Gas Networks became a trainer for this course. The charity hopes that the other Gas Distribution Networks, suppliers and indeed all members of the fuel industry will make sure their staff receive this training or something similar.

Please see <a href="http://www.co-gassafety.co.uk/information/trainers-of-gas-installers/">http://www.co-gassafety.co.uk/information/trainers-of-gas-installers/</a>.

Matthew's death also intensified CO-Gas Safety's belief that all those working with any combustible fuel should be equipped with Personal Alarm Monitors (PAMs) for CO. Please see our case study of John Courtney's near-fatal experience for more details of this issue. He was an emergency gas service FCO exposed to CO while working. <a href="https://www.co-gassafety.co.uk/case-studies/non-fatal/">https://www.co-gassafety.co.uk/case-studies/non-fatal/</a>