

CO-GAS SAFETY'S STATISTICS OF DEATHS AND INJURIES*

UK deaths caused by accidental Carbon Monoxide (CO) poisoning

(Between 1 Sept 1995 - 31 Aug 2013): **Total: 653**

TENURE	
Total Number of CO accidental deaths by Tenure: (1 Sept 95 – 31 Aug 2013):	
Owner/Occupier	378
Private Rental	68
Council	61
Housing Association	21
Other (e.g. hotel)	12
Unknown	113

SITUATION					
Total Number of CO accidental deaths by Situation (1 Sept 1995 – 31 Aug 2013):					
House	311	Campervan	11	Public House	4
Flat	92	Lorry	7	Tent	4
Bungalow	42	Shed/Cabin	7	Shop	3
Caravan	28	Hotel	7	Public Hall	2
Boat	24	Workshop	6	Care Home	2
Garage	23	Car	5	Other	21
Work Place	14	Commercial Premises	4	Unknown	36

FUEL TYPE																			
Total Number of CO accidental deaths by Fuel breakdown and CO-Gas year (1 Sept to 31 Aug):																			
Year	95/6	96/7	97/8	98/9	99/00	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8	08/9	09/10	10/11	11/12	12/13	Total
Solid fuel	27	19	25	14	17	14	5	8	3	5	8	14	10	6	7	7	9	2	200
Gas Mains	32	22	18	24	14	16	7	11	9	14	12	9	11	16	4	12	0	3	234
Gas Portable	8	8	6	6	10	5	7	7	6	4	7	4	3	6	5	5	1	1	99
Petrol/ Diesel	6	7	3	6	3	3	8	1	2	3	2	9	5	4	6	4	2	3	77
Oil	0	2	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	6
Paraffin	0	0	0	1	1	0	0	0	2	0	0	0	1	0	0	0	0	0	5
Unknown	1	0	0	0	0	0	4	4	0	3	4	2	1	3	0	2	1	5	30
Total	74	58	52	51	46	38	31	31	22	29	33	39	31	36	23	30	13	16	653

Near-Misses from Accidental Carbon Monoxide Poisoning in UK

(01 Sept 1995 - 31 Aug 2013): **Total: 4686**

More than 2188 requiring hospital treatment and of those over 379 had lost consciousness

Year	95/6	96/7	97/8	98/9	99/00	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8	08/9	09/10	10/11	11/12	12/13
	467	449	320	386	335	296	87	145	171	213	153	329	192	263	187	155	280	258

Deaths from Gas Explosion in UK (Sept 1995 to Aug 2013): **Total: 106**

Year	95/6	96/7	97/8	98/9	99/00	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8	08/9	09/10	10/11	11/12	12/13
	11	5	6	6	13	6	6	5	15	4	4	4	5	4	4	5	2	1

* Information is collected from the International Press Cuttings Bureau on a daily basis and from other sources. Coroners are contacted about all deaths. The tabulated data presented here is based on the December 2013 update. For further details please visit www.co-gassafety.co.uk

CO-Gas Safety data on deaths from unintentional CO poisoning put into HSE years (1 April to 31 March)

Year	95/6	96/7	97/8	98/9	99/00	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8	08/9	09/10	10/11	11/12	12/13	Total
Solid fuel	26	18	22	17	13	19	5	8	3	5	8	12	10	8	7	6	14	0	201
Gas Mains	28	22	18	23	17	18	6	12	10	13	9	10	12	14	8	12	2	1	235
Gas Portable	8	6	6	7	10	5	6	7	8	2	8	3	5	5	4	6	3	0	99
Petrol/ diesel	3	7	5	5	4	3	6	4	2	2	2	8	7	2	8	4	2	3	77
Oil	0	2	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	6
Paraffin	0	0	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	0	5
Unknown	1	0	0	0	0	0	2	5	0	3	3	3	1	3	0	1	7	1	30
Total	66	55	51	52	46	45	25	36	23	27	30	36	37	33	28	29	29	5	653

Please note that HSE collect statistics for domestic/commercial gas fatalities due to both LPG and Natural Gas. Workplace CO deaths recorded could (theoretically) arise from incomplete combustion of any type of fuel. In contrast, CO-Gas Safety collects statistics with regard to unintentional CO related deaths and injuries from all fuels.

CO-Gas Safety data on deaths from unintentional CO poisoning put into Gas Safety Trust years (1 July to 30 June)

Year	95/6	96/7	97/8	98/9	99/00	00/1	01/2	02/3	03/4	04/5	05/6	06/7	07/8	08/9	09/10	10/11	11/12	12/13	Total
Solid fuel	27	18	26	13	16	15	6	8	3	5	7	13	9	9	7	6	11	2	201
Gas Mains	30	21	21	24	14	17	7	11	9	14	12	7	13	16	4	12	0	2	234
Gas Portable	8	8	5	7	10	4	8	7	6	2	8	4	4	5	4	6	2	1	99
Petrol/ diesel	5	7	4	6	3	3	8	1	2	2	3	7	7	4	6	4	2	3	77
Oil	0	2	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	6
Paraffin	0	0	0	1	1	0	0	0	2	0	0	0	1	0	0	0	0	0	5
Unknown	1	0	0	0	0	0	3	4	0	3	4	2	1	3	0	2	1	5	29
Total	71	56	56	51	44	39	32	31	22	26	34	33	36	38	22	30	16	14	651

Please note. CO-Gas Safety started collecting its data on the 1st September 1995 so for 95-96, the data put into HSE year (April to March) and Gas Safety Trust year (June to July) is only partial for the time period.

Table RIDGAS

Incidents reported in Great Britain relating to the supply and use of flammable gas (a) 2008/09- 2012/13p

Type of incident (b)		Year				
		2008/09	2009/10	2010/11	2011/12	2012/13p
Total number of incidents		203	223	278	173	219
	Carbon monoxide poisoning	172	196	229	142	187
	Other exposure e.g. to unburnt gas	4	6	13	7	6
	Explosion/fire	27	21	36	24	26
Total number of fatalities		18	10	17	4	10
	Carbon monoxide poisoning	15	9	13	3	9
	Other exposure e.g. to unburnt gas	1	-	1	-	-
	Explosion/fire	2	1	3	1	1
Total number of non-fatalities		324	330	428	266	343
	Carbon monoxide poisoning	289	292	368	226	302
	Other exposure e.g. to unburnt gas	5	11	12	8	6
	Explosion/fire	30	27	48	32	35

Notes:

Source: RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

Regulation 6(1) of RIDDOR places a duty on certain conveyors of gas (including LPG), to notify HSE of an incident involving a fatal or major injury that has occurred as a result of the distribution or supply of flammable gas. The statistics published above are as reported to HSE. When a report is made under Reg 6(1), it will be at an early stage of the incident, thus the detailed circumstances of the incident will not have been confirmed.

From 1 October 2013, RIDDOR changed slightly in respect of the above reporting criteria ('RIDDOR 2013' replacing 'RIDDOR 95'). However, this change does not currently affect the figures in the above table. For more information please see 'gas incidents' at: <http://www.hse.gov.uk/riddor/reportable-incidents.htm>

From September 2011 reporting arrangements changed, see: [Summary of the effects to statistics for 2011/12 onw](#)

p Provisional

- (a) Mainly piped gas but also includes bottled LPG
- (b) An incident can cause more than one fatality or injury

General information on domestic gas safety is available at: <http://www.hse.gov.uk/gas/domestic/index.htm>

Comment by CO-Gas Safety: Please note that although RIDDOR imposes a duty to notify HSE, it seems that HSE is under no specific duty to investigate. HSE always investigates if there is a fatality but, in our over 18 years of experience, does not usually investigate a mere incident or injury, unless extremely serious.

CO-Gas Safety reminds readers that our data is the only data:-

1. To be collected directly from the media and other sources with regard to all fuels.
2. Checked with the Coroner concerned, although of course we can't insist that the Coroner helps us, but most do. We have been doing this since 1995.
3. Is widely published with the names of the dead in England and Wales published on our website so anyone can check its validity re the deaths. We obviously can't publish the near misses in the same way due to confidentiality. The deaths from CO all have a public inquest in England and Wales, so they are already in the public domain.

4. Is collected, collated and published by a victim based charity, which really cares about its accuracy.
5. Has been favourably reviewed and favourably compared to the data of the Gas Safety Trust by the independent 'Straight Statistics' (see attached) headed by Nigel Hawkes, an eminent Science writer (see <http://www.straightstatistics.org/article/carbon-monoxide-killer-no-official-record> and <http://www.straightstatistics.org/about-us>). We had to correct the data provided by the Gas Safety Trust in summer 2012. One of their 'barbecue deaths' was in the wrong year and was not caused by a barbecue but by a generator.
6. Is not supporting a profit for an organisation to do this.
7. Has a form on our website for the Coroner to fill up after the inquest and which we encourage them to look at before the inquest in order to think about what evidence they need to call at the inquest (e.g. was there a CO alarm and was it to EN 50291, was it in date and did it work?).
8. And thanks to the Gas Safe Charity, is now the only data to have been validated by an Independent statistician, Dr. Craggs.

No other body does all this, which we find extraordinary especially as the two wealthy charities Gas Safe Charity and the Gas Safety Trust have vast resources compared to us (£1.5 million, £4.5 million respectively). CO-Gas Safety has no official funding for the data and lives very hand to mouth.

We have recently applied to both charities for funding to continue our data. The Gas Safety Charity has refused on the grounds that it has agreed with the Gas Safety Trust that only the GST will undertake research. The Gas Safety Trust has refused on the grounds that the GST has decided to undertake its own data collection from all fuels, which basically means the GST must reinvent the wheel, when we have four and a vehicle on top. This just seems a waste of resources to us.

Baroness Finlay recommended pooling all data, which is very sensible. Although our data is now hugely valuable (as we have data from all fuels from 1995), CO-Gas Safety's directors would be happy to donate, this historical data provided either CO-Gas Safety, (which is a victim based organisation) is funded to continue the data collection, collation and publication or provided a committee of equal numbers of victims and industry oversee the data collection and collation but that CO-Gas Safety is still free to publish responsibly. Both the GSC and the GST are wealthy but lack a single victim on their boards. Most of their trustees are industry based.

Giovanni Leonardi, of Public Health England is keen on using our data to start the central database as recommended by Baroness Finlay. We have been told that although PHE will write letters of support with regard to our funding applications, it cannot provide any funding in the foreseeable future.

We know that all published data is only the tip of an iceberg. One reason is that GPs almost never diagnose CO and another is that there is no automatic testing of dead bodies for CO, even in cases of unexplained deaths. There are estimated to be 3,500 unexplained deaths between the ages of 16 and 64 in the UK every year (Killer with no name, New Scientist December 4th 2004).

In CO-Gas Safety's opinion the gas industry should welcome our data and its continuance as a victim organisation is saying that, particularly per user, gas is much safer than solid and other fuels.