

Industrial accidents in city gas service in Japan in 1999-2020

city gas service industry Code No.011602

Type of accidents in city gas service in 1999-2020

Type of accidents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
fall from height	11	11	15	19	16	11	16	6	7	6	12	3	7	4	10	3	11	3	2	6	12	11
falling to same level	21	23	20	24	24	14	22	12	18	17	10	12	11	10	16	8	8	9	11	13	7	16
crash	6	6	0	4	6	3	4	2	2	3	3	1	3	2	1	2	2	2	1	7	0	1
struck by flying or falling object	3	3	5	3	1	2	0	3	5	2	1	1	4	2	0	2	2	1	0	1	1	2
collapse	0	0	1	3	0	1	0	0	0	0	0	1	1	1	0	2	0	1	0	1	0	0
crashed by	0	3	4	1	1	-	0	1	1	0	0	2	0	1	1	1	0	2	2	1	2	2
caught in/between	7	3	4	4	6	1	3	6	1	2	3	1	3	0	0	1	1	4	2	2	0	1
cut	4	1	2	1	1	-	1	0	3	1	1	0	1	2	0	1	0	0	0	0	0	0
injury to the sole of the foot	1	0	0	-	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	0	0	0	-	0	-	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	1	1	1	4	0	2	1	1	2	3	2	0	0	1	1	3	0	2	2	0	2	1
contact to harmful substance	1	3	1	5	0	-	1	1	0	0	0	1	1	0	0	0	1	0	1	0	0	0
electric shock	0	0	0	-	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
explosion	4	1	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
burst	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
fire	0	0	3	-	0	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
traffic accident (public road)	17	18	21	20	17	9	15	7	12	15	8	7	5	10	7	13	12	9	7	7	7	6
traffic accident (others)	0	0	1	1	0	-	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0
reaction to motion/improper motion	5	12	14	10	10	3	5	7	6	8	7	10	9	4	3	2	5	4	4	6	17	9
others	3	1	2	-	0	3	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0

unclassifiable	0	0	1	1	0	-	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
total	84	86	95	100	83	49	69	46	57	58	48	41	48	37	40	38	42	37	33	45	48	50

Causal agents (middle) of industrial accidents in city gas service in 1999-2020

Causal (M) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine	0	0	0	-	0	-	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	-	0	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
woodworking machine	0	0	0	-	0	-	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
construction machine	0	0	1	-	1	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	0	1	0	1	0	-	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
general machine	0	2	0	1	1	-	1	1	0	1	0	1	0	2	0	1	1	2	0	1	0	0
mobile silviculture machine																	0	0	0	0	0	0
crane	2	0	0	-	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
conveying machine	3	3	2	6	4	3	6	4	5	2	2	1	5	0	1	1	1	0	0	0	1	1
vehicle	19	21	20	20	19	9	10	5	13	15	9	8	4	9	8	13	11	9	8	8	8	8
pressure vessel	0	0	0	2	1	1	2	2	2	0	1	1	0	1	0	1	0	1	0	0	0	0
chemical facilities	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	1	-	0	-	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	0	1	-	0	-	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	3	2	4	1	3	-	4	0	1	0	2	1	1	1	1	0	0	1	0	2	0	0
tools	0	3	5	4	2	2	2	0	1	4	0	0	1	3	4	0	3	2	1	3	3	6
other equipments, facilities	1	3	6	4	2	-	2	2	4	3	2	0	2	0	2	2	2	0	3	0	0	0
temporary buildings,	30	30	29	37	40	22	22	17	17	18	18	13	21	14	17	11	18	12	12	19	20	26

equipment																						
arc welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron			1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial dryer			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other kiln, caldron			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transmission			1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric power facilities			0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other electrical equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power cranes			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power hauling equipment			4	2	4	0	0	0	1	1	1	1	1	0	0	1	0	2	0	0	0	0
human power machine			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool			0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ladder			4	2	2	0	0	2	0	0	0	2	3	0	2	1	0	3	2	2	2	2
slinging tool			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other tools			1	0	0	0	1	1	0	0	1	1	1	0	1	1	1	0	1	4	4	4
other equipment, facilities			6	2	2	2	4	3	2	0	2	0	2	2	2	0	3	0	0	0	0	0
scaffolding			0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
timbering			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
stairs, landing stage			10	10	5	6	4	5	2	3	8	3	6	3	8	1	1	6	9	8	8	8
opening			1	2	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
roof, beam, haze, crossbeam, principal rafter			0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
working platform, boot board			0	1	2	3	2	0	3	1	0	2	2	0	0	0	1	1	0	2	2	2
passage			11	12	9	6	5	7	6	6	3	6	2	5	7	5	7	5	7	10	10	10
building, establishment			6	9	4	1	2	6	4	2	6	1	5	2	2	3	2	3	2	3	3	3

19 years old or less	0	1	0	-	0	-	0	0	1	1	1	0	1	1	0	0	0	1	0	0	0	0
20-29	10	13	18	9	5	5	3	7	4	6	5	3	3	4	5	9	8	6	6	3	5	8
30-39	19	17	18	20	13	9	19	8	16	7	13	9	10	11	9	6	5	5	2	6	9	4
40-49	25	21	17	36	17	13	16	11	12	16	9	11	13	4	11	8	13	8	8	11	16	14
50-59	27	32	39	32	41	18	27	17	20	19	13	11	13	14	9	12	10	11	12	17	11	18
60 years old or more	3	2	3	3	7	4	4	3	4	9	7	7	8	3	6	3	6	6	5	8	7	6
total	84	86	95	100	83	49	69	46	57	58	48	41	48	37	40	38	42	37	33	45	48	50

Workers' number of workplace of industrial accidents in city gas service in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	12	4	11	8	4	5	7	6	8	0	6	5	2	5	5	0	3	3	5	3	7	6
10-29	14	12	15	9	10	7	10	7	14	9	12	13	13	3	5	8	5	10	3	9	9	11
30-49	14	5	4	9	9	6	15	8	3	12	4	2	5	2	4	7	7	3	2	4	6	5
50-99	16	17	11	20	25	12	12	5	11	10	11	4	10	7	12	4	8	9	5	6	10	9
100-299	21	27	37	40	18	11	16	12	12	12	9	10	9	14	9	12	14	8	11	16	6	10
300 workers or more	7	21	17	14	17	8	9	8	9	15	6	7	9	6	5	7	5	4	7	7	10	9
total	84	86	95	100	83	49	69	46	57	58	48	41	48	37	40	38	42	37	33	45	48	50

Month of industrial accidents in city gas service in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	4	6	9	7	7	2	8	5	5	6	5	3	5	5	5	2	8	3	4	3	3	3
February	15	7	5	5	3	5	5	5	5	6	3	1	3	6	6	4	1	3	3	12	3	6
March	7	6	14	7	9	3	6	5	6	2	4	3	5	6	2	7	4	4	2	3	9	3
April	2	10	8	9	11	4	4	0	6	7	6	6	6	5	1	2	2	0	2	3	3	2
May	6	4	7	9	10	2	6	8	6	8	3	3	3	1	4	3	1	4	2	0	2	4
June	8	9	10	5	9	3	5	3	2	5	4	3	4	2	4	4	2	3	4	4	3	6
July	5	5	10	15	5	9	8	2	5	4	6	6	4	2	1	5	6	3	1	3	8	5
August	10	3	9	6	3	4	5	2	5	3	3	0	0	1	2	2	9	3	3	2	5	3
September	13	6	7	8	8	5	4	4	2	3	4	4	7	3	3	1	2	0	1	5	5	8
October	4	10	6	13	10	2	6	1	6	6	2	4	3	3	3	2	4	7	4	0	2	3
November	2	7	6	11	4	5	2	3	5	1	5	5	4	2	3	2	0	3	4	6	4	2
December	8	13	4	5	4	5	10	8	4	7	3	3	4	1	6	4	3	4	3	4	1	5

total	84	86	95	100	83	49	69	46	57	58	48	41	48	37	40	38	42	37	33	45	48	50
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Prefecture of industrial accidents in city gas service in 1999-2020

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hokkaido	3	3	3		6		7	2	2	1	0	1	0	0	0	1	0	2	1	1	3	3
Aomori	2	1	0		1		1	0	0	0	0	0	1	0	2	0	0	1	0	1	0	1
Iwate	0	0	0		1		0	0	1	0	1	0	0	1	0	0	0	0	0	1	1	0
Miyagi	1	1	1		2		5	1	3	5	1	0	4	0	0	3	1	1	2	5	5	4
Akita	0	0	0		0		0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Yamagata	5	0	0		0		0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0
Fukushima	0	0	1		2		0	1	0	2	0	1	2	4	0	0	0	2	0	0	0	0
Ibaraki	1	0	1		1		0	1	2	2	0	0	3	0	2	1	0	1	0	0	1	1
Tochigi	0	0	2		0		0	0	0	0	0	0	1	1	2	1	0	0	2	0	0	1
Gunma	1	0	2		1		0	2	1	0	1	1	0	3	0	1	1	1	1	0	0	1
Saitama	2	4	5		1		4	3	4	2	2	8	3	2	2	1	2	2	2	2	1	4
Chiba	7	12	5		7		8	2	9	1	6	2	3	3	1	7	8	4	4	3	4	6
Tokyo	13	21	23		14		10	1	3	3	3	11	7	6	6	7	4	1	1	0	3	5
Kanagawa	7	8	12		2		1	1	1	3	1	0	2	0	5	1	1	1	5	7	2	1
Niigata	1	0	0		0		0	0	0	0	2	1	0	0	1	1	2	1	1	0	0	1
Toyama	0	0	1		1		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Ishikawa	1	0	0		0		0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0
Fukui	2	0	0		0		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Yamanashi	0	0	1		0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Nagano	1	0	2		0		1	2	1	1	0	0	0	0	1	0	0	0	1	0	1	1
Gifu	2	5	2		2		0	0	0	2	2	0	0	0	0	0	0	1	0	1	2	1
Shizuoka	4	1	7		3		4	1	5	4	3	0	2	1	0	1	4	3	0	4	1	1
Aichi	5	3	3		7		7	5	3	6	1	5	1	1	4	2	3	1	3	4	1	2
Mie	1	2	1		0		0	2	0	1	3	0	0	1	0	1	0	0	2	1	0	2
Shiga	0	0	0		1		3	1	0	0	0	0	1	0	0	0	1	0	0	0	0	1
Kyoto	2	1	1		2		0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
Osaka	3	12	4		7		1	2	4	4	4	2	5	3	1	0	2	1	2	4	3	0
Hyogo	5	1	2		5		2	3	3	1	0	0	0	1	1	0	1	2	0	0	2	4
Nara	1	1	0		0		0	0	1	1	2	0	0	1	1	1	2	0	2	0	0	0
Wakayama	0	1	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tottori	0	1	0		1		0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0

construction machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
general machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveying machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
pressure vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipments, facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
hazards, harmful substances	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
other causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	1	1	1	0	0	0	0	1	0	0	0	1	1	1	0	0	1	0	0	0	0	0

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyazaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagoshima	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	1	1	1	0	0	0	0	1	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0

Data sources: <https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.htm> (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2020e_industry.html