

Fatal and non-fatal accidents in fire resisting products in Japan in 1999-2022

fire resisting products industry Code No.010904

Type of accidents in fire resisting products in 1999-2022

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	2021	2022	total
fall from height	5	6	2	5	5	9	2	10	2	3	2	3	2	4	4	4	1	4	5	3	5	2	5	1	94
falling to same level	3	5	7	7	3	4	7	3	2	4	4	3	2	2	4	3	2	6	7	3	2	3	6	4	96
crash	2	3	5	2	5	3		5	2	2			1	1			1	1	2	2			1	1	39
struck by flying or falling object	8	8	10	5	3	4	1	1	5	6	1	4	4	2	4	2		3	2	2	4	1	1	2	83
collapse		2	1		1	2		1	2	1			1		2	1		1		1		1			17
crashed by	4	4	1	1	1		2		1	1	2	4			2		1	1	1	2	1			2	31
caught in/between	23	23	18	14	18	11	20	10	13	14	9	10	8	11	9	14	8	6	11	7	5	7	3	8	280
cut	1	2	2	2	3	3		1	1	3	1			1		1	2					1		1	25
injury to the sole of the foot		1																							1
drown																									
contact to high/low-	1	3		2		1	1	1	2	2		1	1				1			1	1	1	1		20

temperature																									
contact to harmful substance									2	1			1							1					5
electric shock	1																								1
explosion		2						2										1							5
burst																									
fire																									
traffic accident (public road)			2	8					1						1		1			1					14
traffic accident (others)																									
reaction to motion/improper motion	3	3	3	1	2	1		6	4	2	1	1	3	4	2	6	3	2	1	4	6		3	3	64
others							1								1	2		1			3	2			10
unclassifiable								1				1													2
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Causal agents (large) of fatal and non-fatal accidents in fire resisting products in 1999-2022

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine	19	18	11	7	17	13	13	8	10	15	5	3	4	5	9	7	4	1	9	7	3	6	1	3	198

crane, conveying machine	11	18	15	23	11	4	9	6	7	3	5	9	3	7	7	9	6	6	4	4	3	1	3	6	180
other equipment	5	9	4	5	7	6	1	5	6	12	3	4	4	3	4	6	1	4	4	4	10	2	5	3	117
temporary buildings, establishments	2	6	8	6	5	7	5	8	3	3	3	6	3	5	3	5	4	10	9	4	3	3	7	5	123
substance, material	11	8	9	3		5	2	8	6	5	5	1	5	1	1	2	1	3	2	2	1	3	1	2	87
load	1	1	3	3		1	1	3	2	2		1	1	3	2	1	1	1		3		1			31
environment	1	2					1		1			1		1			1	1		1			1		11
others	1		1		1	2	2	2	1			2	2	1	2	4	1	1	1		9	2	2	3	40
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Causal agents (middle) of fatal and non-fatal accidents in fire resisting products in 1999-2022

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	2021	2022	total	
engine																										
power transmission mechanism	3	2	1			2	1			1			1		1	2	1	1	2	1						19
woodworking machine	2				1	1			2								1		1			1				9

other equipments, facilities	3		1		1				1	3		2	3		1	1			1	1			1	19	
temporary buildings, establishments	2	6	8	6	5	7	5	8	3	3	3	6	3	5	3	5	4	10	9	4	3	3	7	5	123
hazards, harmful substances			2	1			1	1		2	1		1											9	
materials	11	8	7	2		5	1	7	6	3	4	1	4	1	1	2	1	3	2	2	1	3	1	2	78
load	1	1	3	3		1	1	3	2	2		1	1	3	2	1	1	1		3		1			31
natural environment	1	2					1		1			1		1			1	1		1			1		11
other causal agent							2					1				1					2	2			8
no causal agent	1		1		1	2		2				1	2	1	2	3	1	1	1		7		2	3	31
unclassifiable									1																1
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Causal agents (small) of fatal and non-fatal accidents in fire resisting products in 1999-2022

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total	
engine																										
power transmission mechanism			1				1			1			1		1	2	1	1	2	1						12

hardening machine																									
demolition machine																									
vehicle for high lift work																									
other construction machines								1																1	
lathe																	1							1	
drill press, milling machine				1				1													1			3	
grinding machine, buffing machine			1				1		1				1				1							5	
power press			1			2	1		2	1	1	1			1			1		1				13	
forging pressure hammer																									
shearing machine																									
other metal manufacturing machines			1						1															2	
centrifugal machine																									
mixer, grinder			1		4		3	2		2	2	1			2	2			1			1		1	22
roll machine (except printingroll)					1		1									1								3	

hauling equipment			1		1					2		1		2						1	1		1	10	
human power machine																									
hand tool					3				2						1					1			1	8	
ladder							1	3	2	2				1	1			1		3		4		18	
slinging tool					1							1	1							1				4	
other tools			2		1				3	3				1	2	2		2	3	3	2	1	1		26
other equipment, facilities			1		1				1	3		2	3		1	1				1	1			1	16
scaffolding					1		1								2										4
timbering																									
stairs, landing stage								2	1	1	1	2		1			1	2	1	1		1	1		15
opening								1						1											2
roof, beam, haze, crossbeam, principal rafter																			1				1		3
working platform, boot board																									
passage			4		1		3	2	2	1	1	1	3	1	2	1	2	5	2	1	1		4	1	38
building, establishment																									
			3							1		2		2	1		1	2	2		1	2		2	19

water																									
abnormal environment																									
high/cold temperature environment								1			1					1			1			1		5	
other environments							1						1				1							3	
other causal agent							2				1				1					2	2			8	
no causal agent			1		1			2			1	2	1	2	3	1	1	1		7		2	3	28	
unclassifiable									1															1	
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Workers age of fatal and non-fatal accidents in fire resisting products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
19 years old or less	1	2	1	1	1	2				2			1		1	1		1						1	15
20-29	9	9	5	7	3	6	5	3	5	4	4	3	4	6	4	3	4	4	4	3	4	2	2	3	106
30-39	8	11	9	8	9	7	6	17	9	8	7	5	3	4	7	8	5	5	5	3	7	5	5	2	163
40-49	9	10	11	9	8	5	7	2	5	10	2	2	5	5	4	9	2	6	8	5	7	2	6	3	142
50-59	12	25	22	16	13	7	9	17	10	10	5	10	4	4	5	4	6	4	3	10	4	5	3	6	214
60 years old or	12	5	3	6	7	11	7	1	7	6	3	7	5	7	7	9	2	7	9	4	7	4	4	7	147

more																									
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Workers' number of workplace of fatal and non-fatal accidents in fire resisting products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less	8	12	5	2	9	5	3	1	8	7	2	3	1	2	2	1		2	6	1	4	2	2	3	91
10-29	14	17	15	21	9	14	10	9	9	7	9	14	9	7	10	13	4	8	5	13	9	3	5	9	243
30-49	10	9	12	10	4	7	6	9	6	8	1	4	4	4	8	7	4	2	4	2	2	5	2	1	131
50-99	12	8	9	4	10	7	8	11	6	6	3	3	3	7	1	6	4	7	6	6	5	2	4	3	141
100-299	4	9	7	6	3	4	5	8	3	8	1	2	3	3	5	6	4	6	6	3	7	5	4	4	116
300 workers or more	3	7	3	4	6	1	2	2	4	4	5	1	2	3	2	1	3	2	2		2	1	3	2	65
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Month of fatal and non-fatal accidents in fire resisting products in 1999-2022

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
January	7	7	7	3	1	2	2	7	2	2	2	2	1	3	1	3	2	2	2	3	1		2	1	65
February	1	6	5	5	5	1	3	3	2	5	1	3	1	4	1	3	3	2	1	3	6	2		3	69
March	6	6	5	6	6	6	5	3	8	7	2		3	3	1	4		1	2		4	1	3	5	87
April	9	2	1	5	1	3	4	3	1	3	1	1	2	1	3	3	2	3	4	1	3	2	1	2	61

May	4	2	4	4	4	3	1	2	1	2	2	2	1			1	1	1	2	1	1	3	1	3	46
June	3	11	5	3	1	4	2	3	2	2	1	3	1	1	2	2	3	5	5	1	1	1		1	63
July	6	5	3	12	4	2	2	3	2	3		4	3	5	1	7	1	3	1	7	5		2	1	82
August	4	9	5	3	5	1	4	2	3	1		3	3	1	5	4	1	1	2	2		2	2	1	64
September	1	6	2		2	4	2	4	6	2	1	2	3		5	3	1	2	2	2	3		1	3	57
October	7	2	7	2	7	5	2	5	3	3	9	1		3	4	2	1	2	5		2		1	1	74
November	1	1	4	3	3	3	3	2	4	5	1	3	3	4	4		2	2	2	3	3	3	3		62
December	2	5	3	1	2	4	4	3	2	5	1	3	1	1	1	2	2	3	1	2		4	4	1	57
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787

Prefecture of fatal and non-fatal accidents in fire resisting products in 1999-2022

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
Hokkaido		2	1							4	1						1		1	1	1				12
Aomori															1	1									2
Iwate	2																								2
Miyagi		1	1				1												1						4
Akita		2	1									1									1				5
Yamagata			1																						1
Fukushima			1				2		2													1		1	7
Ibaraki		1					1		1							2			1						6

Nara	1							1			1														3	
Wakayama	1									1					1								1			4
Tottori																										
Shimane	1	1	1					1	1																	5
Okayama	9	12	7		3		9	1	8	8	1	5	3	4	5	9	4	7	7	4	7	4	6	5	128	
Hiroshima	1	2	1				2			2	5	2	1	3	4	1	1	2	1	2		1		1	32	
Yamaguchi		1							1																	2
Tokushima					1																					1
Kagawa	1	1					1						1			1										5
Ehime																										
Kochi			2																							2
Fukuoka	6	5	1		7		4	4	3	4	2	4	2	3	2	4	3	2	1	2	1		3	2	65	
Saga		1									1															2
Nagasaki			1					3					1													5
Kumamoto	1																									1
Oita	2	2	1		1														1	1	1					9
Miyazaki																										
Kagoshima								1	1						1											3
Okinawa																										
total	51	62	51	47	41	38	34	40	36	40	21	27	22	26	28	34	19	27	29	25	29	18	20	22	787	

unclassifiable																								
total	1	1		1	2		1		2							2		1						11

Causal agents (large) of fatal accidents in fire resisting products in 1999-2022

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine							1																		1
crane, conveying machine		1		1	2											1									5
other equipment																1		1							2
temporary buildings, establishments									1																1
substance, material																									
load	1																								1
environment																									
others									1																1
total	1	1		1	2		1		2							2		1							11

Causal agents (middle) of fatal accidents in fire resisting products in 1999-2022

equipment																								
kiln, caldron																1								1
electric equipment																								
human power machine, tools																								
tools																								
other equipments, facilities															1									1
temporary buildings, establishments								1																1
hazards, harmful substances																								
materials																								
load	1																							1
natural environment																								
other causal agent																								
no causal agent								1																1
unclassifiable																								
total	1	1		1	2		1	2							2		1							11

other materials																							
load	1																						1
machine/equipment as load																							
natural ground, rock																							
standing tree																							
water																							
abnormal environment																							
high/cold temperature environment																							
other environments																							
other causal agent																							
no causal agent								1															1
unclassifiable																							
total	1	1		1	2		1		2						2		1						11

Workers age of fatal accidents in fire resisting products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------

19 years old or less																								
20-29				1			1								1									3
30-39		1													1		1							3
40-49	1								1															2
50-59					1				1															2
60 years old or more					1																			1
total	1	1		1	2		1		2						2		1							11

Workers' number of workplace of fatal accidents in fire resisting products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less																									
10-29																1									1
30-49		1		1					1																3
50-99	1						1																		2
100-299					1											1		1							3
300 workers or more					1				1																2
total	1	1		1	2		1		2							2		1							11

Aomori																							
Iwate																							
Miyagi																							
Akita																							
Yamagata																							
Fukushima							1																1
Ibaraki														1									1
Tochigi																							
Gunma																							
Saitama																							
Chiba																							1
Tokyo																							
Kanagawa																							
Niigata																							
Toyama																							
Ishikawa																							
Fukui																							
Yamanashi																							
Nagano																							
Gifu																							
Shizuoka																	1						1

Kumamoto																									
Oita																									
Miyazaki																									
Kagoshima																									
Okinawa																									
total	1	1		1	2		1		2						2		1								11

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

Return to https://www.jisha.or.jp/english/statistics/2022e_industry.html