

Fatal and non-fatal accidents in nonferrous metals/rolling products in Japan in 1999-2022

nonferrous metals/rolling products industry Code No.011101

Type of accidents in nonferrous metals/rolling 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	17	22	20	13	13	13	13	16	10	11	18	9	6	6	9	12	11	11	11	9	14	9	11	6	290
falling to same level	13	11	13	18	13	11	13	13	9	7	13	9	11	9	11	8	13	11	7	7	11	11	13	14	269
crash	6	5	3	7	5	5	3	9	6	6	3	6	1	4	6	1	4	2	6	8	3	9	6	2	116
struck by flying or falling object	21	19	18	20	14	15	11	15	12	11	9	13	11	9	8	6	11	8	13	13	4	7	10	8	286
collapse	8	4	3	1	5	1	2	7	7	4	5	2	3	5	5	3	7	2	3	3	2	2	3	5	92
crashed by	13	10	7	11	7	10	7	18	13	12	7	2	9	6	1	11	4	9	4	4	5	6	6	6	188
caught in/between	59	57	48	66	49	54	32	42	51	51	35	29	43	23	33	40	26	38	26	28	42	33	27	25	957
cut	7	7	8	10	2	1	6	8	6	1	1	3	10	5	6	2	3	4	3	3	6	2		7	111
injury to the sole of the foot	2			1				1		1		1		1		1				1		1			10
drown																1									1
contact to high/low-	25	29	16	21	17	23	22	18	15	16	20	17	14	12	13	12	13	8	13	12	7	12	6	13	374

temperature																									
contact to harmful substance	4	7	3	1	6	2	10	4	5	1	6	3	6	4	3	1	3	3	1	7	3	1	4	3	91
electric shock		1	1									1									1				4
explosion	7	6	2	2	1	3	2	3	9	3	5	2	1	3	3		3	4	1			1	2	2	65
burst				5	1														1						7
fire		1				1						1	1			1	1			2					8
traffic accident (public road)		2	2	1	1	2			2			1	2			1	1	2	1			2			20
traffic accident (others)									1							1	1								3
reaction to motion/improper motion	8	11	6	8	4	1	14	11	7	11	4	11	4	6	4	2	3	4	4	8	12	11	19	18	191
others					3	1		2	1			1	2		2		1		1		1		5	2	22
unclassifiable		1			1																				2
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Causal agents (large) of fatal and non-fatal accidents in nonferrous metals/rolling 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	43	42	38	41	36	31	25	36	35	30	28	20	34	23	24	26	22	27	22	17	34	33	12	19	698

crane, conveying machine	30	34	25	45	34	35	22	29	31	31	22	16	23	13	22	24	19	25	20	18	14	9	22	13	576
other equipment	32	32	30	32	24	31	30	27	34	26	22	24	19	17	12	18	23	12	16	16	17	25	21	14	554
temporary buildings, establishments	17	23	17	17	11	11	17	20	10	15	16	12	12	10	16	11	14	11	10	16	14	14	16	22	352
substance, material	47	48	29	39	28	20	29	36	34	21	23	32	25	21	16	14	21	20	13	27	17	13	23	26	622
load	13	4	6	3	3	6	4	8	3	6	5	3	4	5	5	4	3	8	6	5	4	8	7	5	128
environment	5	4	2	3	1	5	2	4	2	2	6			1	5	3	1	1	4	3		1	1	7	63
others	3	6	3	5	5	4	6	7	5	4	4	4	7	3	4	3	2	2	4	3	10	5	10	5	114
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Causal agents (middle) of fatal and non-fatal accidents in nonferrous metals/rolling 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				1										1					1						3
power transmission mechanism	4	9	2	2	2	4	1	2	3	3	2	1	1	1	1	2		1	3	4	4	2		2	56
woodworking machine		1	1	1				1			1	1			1	1			1	1		1		1	12

pressure vessel			1										1											2	
other pressure vessels									1															1	
chemical facilities				1				2					1				1	1						6	
gas welding equipment											1		1										1	3	
arc welding equipment																									
other welding equipment																									
kiln, caldron			9		11		9	4	9	9	8	10	5	7	3	6	9	1	4	2	2	5	6	3	122
industrial dryer			1																					1	
other kiln, caldron									1				1		1		1				2			7	
transmission																									
electric power facilities			1									1												2	
other electrical equipment							1				1													2	
human power cranes					1				1													1		1	4
human power hauling equipment			2		1		3	1	1	1		2	1	2				1		1			3	2	21

human power machine			1																			1		2	
hand tool			5		1		3	4	5	4	1	2	2		1	2	1			1	3	2		1	38
ladder			2		2		3	4		2	3	3	2	2		2	2	3	3		4	2	5	2	46
slinging tool								1	1			3	3	1	1	2	1	1		1				1	16
other tools			4		5		7	7	4	1	2	1		2	2	3	4	3	3	4	3	8	5	1	69
other equipment, facilities			4		2		4	6	10	8	7	1	5	1	3	3	5	3	4	6	5	5	1	2	85
scaffolding							1												1						2
timbering																									
stairs, landing stage			3		2		3	2	2		6	1	2	1	2	2	3	2	1	2	3	1	6	3	47
opening			1				1	3	1		2				1			1	1				2	1	14
roof, beam, haze, crossbeam, principal rafter					1				1	2							1		1			1			7
working platform, boot board			3				3	5	2	9	1	4	2		3	1	2	1	2	3	3	2	2	3	51
passage			6		6		5	6		2	6	3	5	6	7	5	4	5	5	2	4	6	3	9	95
building, establishment			3		1		4	2	4	1		1	3	2	1	2	1	2		6	3	2	2	4	44
other temporary buildings,			1		1			2		1	1	3		1	2	1	3			2	1	2	1	2	24

environment							1	1		3														5	
high/cold temperature environment			1		1		2	3	1	1	2			1	5	2	1		3	3		1	1	7	35
other environments			1							1	1					1		1	1					6	
other causal agent			1		1		1	4	2			2	1		1	1			2	1	1		5	1	24
no causal agent			2		4		4	2	3	3	4	2	6	3	2	2	2	2	2	2	9	5	5	4	68
unclassifiable							1	1		1					1									4	
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Workers age of fatal and non-fatal accidents in nonferrous metals/rolling 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	9	11	2	5	2	4	3	2	5	3	3	1	4	1	2		1	4	4	3	3	3		1	76
20-29	38	39	29	30	26	31	29	39	28	25	22	23	21	19	16	22	17	21	15	12	18	12	12	20	564
30-39	40	33	21	39	39	34	37	35	38	34	34	25	31	22	30	19	30	24	20	21	19	34	26	24	709
40-49	37	41	42	42	21	29	23	40	36	30	18	24	27	28	24	25	24	21	28	36	32	25	38	25	716
50-59	54	55	47	52	43	28	28	39	38	29	29	24	26	13	19	17	19	16	14	21	22	22	27	26	708
60 years old or more	12	14	9	17	11	17	15	12	9	14	20	14	15	10	13	20	14	20	14	12	16	12	9	15	334
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Workers' number of workplace of fatal and non-fatal accidents in nonferrous metals/rolling 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	24	33	23	24	19	20	20	25	16	20	14	16	17	9	13	8	19	12	8	10	8	11	8	7	384
10-29	47	35	44	42	30	36	41	39	32	27	31	33	23	27	23	28	33	24	23	30	23	22	15	25	733
30-49	18	30	18	39	24	20	21	28	35	23	14	11	19	13	14	14	13	17	14	12	12	19	16	14	458
50-99	27	36	22	23	28	16	14	31	23	23	18	18	14	14	16	13	7	20	15	20	20	19	26	16	479
100-299	37	33	18	27	16	23	22	28	23	22	22	16	28	18	20	20	17	20	13	13	16	16	16	20	504
300 workers or more	37	26	25	30	25	28	17	16	25	20	27	17	23	12	18	20	16	13	22	20	31	21	31	29	549
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Month of fatal and non-fatal accidents in nonferrous metals/rolling 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	20	9	16	10	11	14	7	13	14	10	13	8	7	14	8	6	15	7	9	4	10	10	5	12	252
February	10	28	9	19	15	7	12	10	8	10	17	10	12	4	13	8	10	11	10	11	10	5	7	5	261
March	11	19	18	18	14	17	10	12	18	16	6	10	12	4	6	10	3	9	11	7	9	13	10	10	273
April	19	21	17	15	7	7	13	17	12	12	7	14	11	12	10	4	12	4	4	14	7	6	18	7	270
May	9	18	19	18	18	7	9	17	14	13	10	11	9	8	7	12	6	12	10	7	7	7	12	8	268
June	21	10	10	12	12	19	12	11	14	15	14	12	17	4	7	6	11	12	10	7	12	8	12	14	282

July	21	17	14	21	16	12	15	20	15	6	11	6	6	8	5	12	13	13	8	15	10	10	8	4	286
August	14	17	6	16	18	11	22	8	13	8	6	11	9	12	13	8	7	10	9	10	11	15	5	8	267
September	19	8	10	13	6	10	8	15	15	11	8	8	10	6	8	12	5	12	13	8	14	7	8	12	246
October	15	18	7	18	11	14	12	14	13	10	11	13	10	8	13	8	7	6	3	9	8	10	7	12	257
November	15	18	10	17	6	13	9	20	11	10	10	3	13	10	9	11	10	4	3	8	7	6	11	8	242
December	16	10	14	8	8	12	6	10	7	14	13	5	8	3	5	6	6	6	5	5	5	11	9	11	203
total	190	193	150	185	142	143	135	167	154	135	126	111	124	93	104	103	105	106	95	105	110	108	112	111	3,107

Prefecture of fatal and non-fatal accidents in nonferrous metals/rolling 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		3			2							1					1		1	1	1			1	11
Aomori			3				1			2	1	5	4			1		1						2	20
Iwate										1				1							1				3
Miyagi	5		1					1		1					3	2	4	1		2					20
Akita	4	10	6		1		3	3	7	2	3	3	1	3	1	2	1	1	2		4	8		2	67
Yamagata	1						1		2	2					1	2	2		5				1		17
Fukushima	4	8	8		6		2	4	8	4	4	5	4	5	6	5	3		3	4	2	4	8	6	103
Ibaraki	11	9	11		8		5	7	10	3	5	9	3	3	4	5	6	7	6	6	5	8	6	7	144
Tochigi	14	6	7		7		4	6	9	5	6	8	3	4	3	5	5	4	1	6	10	6	5	3	127
Gunma	4	5	3		1		9	12	5	3	4	7	6	2	2	2	3	3	3	3	4		1	1	83

Saitama	9	11	14		11		11	11	14	8	16	10	10	7	9	7	5	9	5	12	7	9	11	8	214
Chiba	7	6	6		3		4	6	2	2		1	9	2	2	3	5	7	3	6	7	4	3	5	93
Tokyo	9	4	5		4		4	5	4	3	2			2	6	1	3	2	3	3	2	2	1	1	66
Kanagawa	5	2	4		1		3	4	1	4	1	3	6		4			4	1	1	1		4	4	53
Niigata		6	6		3		2	8	2	3	2	1	5	8	5	1	2	3	3	2	4	6	4	6	82
Toyama	10	8	2		4		3	8		9	7		3	3	5	7	6	2	7	3	4	2	5	3	101
Ishikawa																									
Fukui	3	6			6		1	1	3	2	1	1	1	2		1		4	1	3	1	2	3	1	43
Yamanashi	1																								1
Nagano	3	3	4		3		1	2	1	1		1		2		1	1	1			1		4	1	30
Gifu	5	3	3		7		14	6	2	3	1	1	3	2	1		3			2		2	1	1	60
Shizuoka	11	10	7		5		5	10	8	7	10	6	3	4	5	10	5	2	5	3	2	9	10	4	141
Aichi	10	23	14		10		14	14	15	12	16	10	17	6	10	8	9	10	12	10	10	7	5	8	250
Mie	7	7	2		6		6	3	2	5	1	4		3	4	1	2	2	1		5	5	5	6	77
Shiga	3	3	3		4		2	2	1	2	1	1	3	2	1	5	1	3	1	2	2	1	1	2	46
Kyoto	9	8	4		9		5	11	13	2	4	3	10	4	4	2	8	5	1	4	7	6	2	4	125
Osaka	21	14	7		9		10	13	13	16	10	10	9	10	8	12	11	4	10	13	9	11	7	11	238
Hyogo	5	7	6		8		3	7	2	6	12	3	9	5	4	1	3	1	2	1	3	2	6	1	97
Nara							1	1		1	1		1			1									6
Wakayama	1							1	1									1							4
Tottori		2			1			1					1					1		1				1	8

environment								1		3														4	
high/cold temperature environment										1														1	
other environments																									
other causal agent																						1		1	
no causal agent																									
unclassifiable																									
total	7	7	5	5	1	3	3	1	4		6	1	4	2	5	5		1	2	1	1		2		66

Workers age of fatal accidents in nonferrous metals/rolling 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								1		1														3
20-29		1	1			1									1	2			1						7
30-39		1	1		1	1			1		1		1	2	2		1								12
40-49	2	3	2	2		1					2		1		1				1	1	1				17
50-59	4	2	1	3			3	1	1		1	1	2		1								1		21
60 years old or more									1		1		1	1		1							1		6
total	7	7	5	5	1	3	3	1	4		6	1	4	2	5	5		1	2	1	1		2		66

Workers' number of workplace of fatal accidents in nonferrous metals/rolling 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							1		1			1													3	
10-29	2		1												1				1					1		6
30-49				1		1	1		1				1	1												6
50-99	1	1						1			2		2			1										8
100-299	1	3		1	1	2			1		3		1	1	3	2		1	1							21
300 workers or more	3	3	4	3			1		1		1				1	2				1	1			1		22
total	7	7	5	5	1	3	3	1	4		6	1	4	2	5	5		1	2	1	1			2		66

Month of fatal accidents in nonferrous metals/rolling 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	1		1						1										1							4
February	1	1														1										3
March		1		1					1				1			1					1					6
April		1	1	1				1						1	2	1										8
May		2				2						1	1	1		1										8
June							1				3					1			1							6

