

Fatal and non-fatal accidents in non organic or organic chemical products in Japan in 1999-2022

non organic or organic chemical products industry Code No.010801

Type of accidents in non organic or organic chemical 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	34	46	49	38	40	44	41	40	39	48	30	37	39	36	21	30	26	44	22	30	35	29	19	35	852
falling to same level	37	34	37	28	42	46	41	43	43	36	29	35	47	35	30	39	29	39	30	36	38	32	42	34	882
crash	15	11	16	17	19	10	11	19	15	11	8	10	13	6	13	12	5	8	3	13	9	13	12	15	284
struck by flying or falling object	18	17	23	14	16	18	18	14	14	13	6	13	10	5	7	14	11	6	11	8	7	9	11	10	293
collapse	8	6	2	1	6	1	3	4	5	7	2	7	3	3	1	3	1	5	1	3	4	3	4	1	84
crashed by	10	19	7	11	9	14	8	14	10	10	5	10	6	4	9	10	4	4	8	4	10	8	8	9	211
caught in/between	79	88	61	76	73	61	74	55	59	57	51	44	40	45	40	47	50	40	47	43	59	38	46	49	1,322
cut	9	15	10	12	20	19	18	10	8	12	12	6	11	12	6	9	5	10	9	6	8	6	6	8	247
injury to the sole of the foot	1	1	2				1			1		2					2	3		1		2	1		17
drown																		1							1
contact to high/low-	18	18	16	27	12	17	11	24	19	13	12	12	11	6	15	11	11	13	15	8	14	13	21	5	342

temperature																									
contact to harmful substance	29	28	34	26	20	33	27	25	38	14	15	17	20	16	15	9	25	25	20	20	18	17	20	18	529
electric shock		1		1	1		1		1	1		1			1				2	1	1			1	13
explosion	5	15	7	3	4	9	7	3	5	3	6	5	5	14	2	6	1	4		3	7	1	7		122
burst		1	1	1	1			1	1	1									1	1				1	10
fire	1		3	1	4	3	3	5	6	1	3		2	3		1	2	2		2	1	2	1	1	47
traffic accident (public road)	1	6	6	4	5	4	3	4		1	1	4	3		2	1		6	3	1	1	3	1	2	62
traffic accident (others)																							1	1	2
reaction to motion/improper motion	40	23	28	32	30	26	38	36	43	32	35	22	27	19	26	24	15	29	26	28	22	34	48	29	712
others		2		1	1	1	1	3	5	3	1	2	2		2	2	3	1		6		1	19	5	61
unclassifiable	1		2	1		1			1							3		2		1	1		1		14
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Causal agents (large) of fatal and non-fatal accidents in non organic or organic chemical 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	68	73	55	53	59	58	53	54	48	49	45	41	30	44	31	33	39	30	35	29	40	25	34	34	1,060

crane, conveying machine	38	49	43	45	37	29	39	38	29	31	20	23	30	17	22	25	23	22	29	18	29	24	22	25	707
other equipment	53	64	53	59	76	60	66	54	61	58	51	62	49	51	39	63	32	59	32	44	42	45	61	54	1,288
temporary buildings, establishments	44	47	54	42	55	57	46	62	66	58	34	38	60	47	38	50	32	55	42	53	63	50	44	44	1,181
substance, material	54	56	61	50	35	60	49	44	57	29	25	32	35	27	30	18	38	40	32	29	31	25	36	27	920
load	20	24	23	29	24	20	24	29	27	26	19	11	18	7	9	16	11	17	12	20	13	14	19	23	455
environment	8	4	5	1	3	7	6	6	5	1	4	6	7	4	6	4	2	7	3	4	8	8	12	4	125
others	21	14	10	15	14	16	23	13	19	12	18	14	10	7	15	12	13	12	13	18	9	20	40	13	371
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Causal agents (middle) of fatal and non-fatal accidents in non organic or organic chemical 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		1						1			5
power transmission mechanism	8	2	4	3	7	1	6	5	1	3	5	4	2	3	6	3	2	4	2	3	3	2	2	5	86
woodworking machine	1	2	1	3	4	2	3	2	4	1	2	3	1			1		1	1	1		1	1		35

demolition machine																									
vehicle for high lift work											1														1
other construction machines			1																						1
lathe			2		1			1			1	1						1			1			8	
drill press, milling machine			1						1			1	1	1	1			1					1	8	
grinding machine, buffing machine					1				1			1	2			1		1						7	
power press			1		1		1	1			1			1	1	1	1			1	1	1		13	
forging pressure hammer									1															1	
shearing machine			2		1			1		1	1								1	1				8	
other metal manufacturing machines			1				3		1	2			2	1		1	1			1	1	1		1	16
centrifugal machine								1		1	1		1				2	1	1	3			1	12	
mixer, grinder			7		7		4	8	6	7	4	6	1	7	4	7	7	7	9	4	8	3	5	9	120
roll machine (except printingroll machine)			8		5		5	3	7	4	9	6	1	6	5	4	2	2	1	2	4	2	6	3	85

pressure vessel			1		3		1	6	1	1	4	4		5	1		1	1						29	
other pressure vessels					1				2	2	1	1	1	1		1		1	1		1	1		15	
chemical facilities			6		9		12	10	8	6	8	5	12	12	6	10	4	4	2	10	6	1	16	6	153
gas welding equipment																									
arc welding equipment																									
other welding equipment															1									1	
kiln, caldron			3		2		1			2	2	2	2				1	1	1	1	1	1		2	22
industrial dryer			2		3		1	2	1	1			1		2	1			1			1			16
other kiln, caldron								2			1						1								4
transmission																		1		1	1	1	1	1	5
electric power facilities					1		1			1		1			1	1		1							7
other electrical equipment			1								1		1		1			1							5
human power cranes			1						1	2		1					1		1	1	1	1	3		13
human power hauling equipment			2		6		9	3	3	3	6	9	6	7	3	3	2	2	5	4	7	6	4	5	95

human power machine							1		1						1	1								4	
hand tool			3		5		8	2	3	7	2	5	3	2	3	7		5	3	2	3	6	3	6	78
ladder			12		17		16	6	13	12	11	14	10	8	5	12	11	12	7	7	6	12	11	18	220
slinging tool			1		2						1	2							1		1		2	1	11
other tools			11		14		7	15	14	9	6	7	8	6	6	10	5	17	4	9	7	6	12	8	181
other equipment, facilities			10		13		10	6	15	11	9	10	6	9	11	15	7	14	5	9	8	10	8	6	192
scaffolding			2				2	1	1	2		1	1				1		2	1	2	1	1		18
timbering																									
stairs, landing stage			10		12		11	16	14	14	9	9	15	12	9	14	4	8	11	18	20	12	7	13	238
opening					1		1	1	3	2		1	1	1		1	1				1	2			16
roof, beam, haze, crossbeam, principal rafter			1		1		2		3	1		1	2		1	1		2			3	1	1	3	23
working platform, boot board			8		12		6	10	6	6	8	5	6	10	2	5	8	9	2	1	4	5	3	2	118
passage			16		11		14	19	20	18	9	6	21	12	14	18	10	22	16	20	20	14	23	16	319
building, establishment			12		10		9	9	16	11	4	9	10	9	8	8	6	7	8	9	7	5	5	6	168
other temporary buildings,			5		8		1	6	3	4	4	6	4	3	4	3	2	7	3	4	6	10	4	4	91

environment			2				1			1											2		1	8	
high/cold temperature environment			1				1	5	3		1	3	3	1	2	2	1	3	3	3	7	5	7	51	
other environments			2		3		2	1	2		2	2	3	1	3	1	1	3		1	1	1	3	2	34
other causal agent			2		5		4	2	5	2		4	1	3	6	3	1	3	2	7	2	4	22	2	80
no causal agent			5		9		19	11	13	9	17	10	8	4	9	7	12	6	11	11	6	16	17	11	211
unclassifiable			3						1	1	1		1			2		3			1		1		14
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Workers age of fatal and non-fatal accidents in non organic or organic chemical 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	10	8	2	5	4	6	7	3	9	4	5	5	2	3	4	6	2	7	4	5	6	1	4	5	117
20-29	62	81	69	65	66	60	57	67	57	45	40	40	38	40	34	34	29	47	27	35	46	26	31	34	1,130
30-39	59	64	69	60	80	81	88	79	74	67	58	73	55	50	51	46	50	44	43	45	45	35	66	26	1,408
40-49	72	60	61	56	58	56	48	57	51	49	45	41	52	51	39	59	39	57	58	51	48	59	72	64	1,303
50-59	80	98	72	81	75	84	77	77	91	69	47	42	64	37	46	55	46	58	41	55	58	57	60	62	1,532
60 years old or more	23	20	31	27	20	20	29	17	30	30	21	26	28	23	16	21	24	29	25	24	32	33	35	33	617
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Workers' number of workplace of fatal and non-fatal accidents in non organic or organic chemical 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	46	43	36	35	40	44	42	37	34	18	24	20	21	16	15	16	10	11	12	17	13	14	14	14	592
10-29	63	54	55	66	64	68	60	56	49	44	39	44	52	45	41	44	41	49	38	35	46	34	43	42	1,172
30-49	47	71	60	45	49	42	41	44	59	48	26	37	37	38	30	29	22	38	22	44	35	45	45	31	985
50-99	49	59	54	54	53	54	53	65	59	48	30	51	39	27	30	43	46	56	46	43	52	30	50	36	1,127
100-299	55	64	56	63	62	67	70	56	68	67	69	43	48	43	43	52	47	56	60	38	57	56	66	61	1,367
300 workers or more	46	40	43	31	35	32	40	42	43	39	28	32	42	35	31	37	24	32	20	38	32	32	50	40	864
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Month of fatal and non-fatal accidents in non organic or organic chemical 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	24	27	31	22	35	28	20	27	16	24	16	30	23	12	16	23	14	22	22	19	18	17	22	22	530
February	32	30	27	25	31	24	22	30	21	28	17	17	23	22	16	16	13	14	17	14	17	16	23	18	513
March	23	28	28	26	21	18	29	24	34	26	12	13	14	17	16	17	7	22	20	18	20	17	16	17	483
April	18	20	30	28	23	19	15	23	26	25	23	16	22	17	10	12	18	23	13	25	17	14	18	14	469
May	27	28	20	23	22	22	22	25	16	17	18	20	14	18	12	29	15	28	25	24	25	25	23	20	518
June	31	38	19	21	25	36	29	26	33	24	19	18	17	16	14	22	14	17	15	19	18	20	26	21	538

July	20	31	26	29	26	27	32	29	28	18	23	33	21	17	30	17	20	21	10	17	16	17	24	20	552
August	28	30	29	30	29	30	35	25	37	25	20	16	19	20	17	15	19	16	17	21	27	22	33	17	577
September	27	27	24	21	29	26	34	22	26	22	10	20	17	21	11	20	14	20	14	15	22	21	37	22	522
October	33	18	21	27	21	31	26	22	31	22	12	12	21	19	21	18	16	25	9	17	27	11	17	13	490
November	19	28	22	22	18	19	23	26	20	18	19	13	28	11	13	12	21	21	20	15	14	17	15	21	455
December	24	26	27	20	23	27	19	21	24	15	27	19	20	14	14	20	19	13	16	11	14	14	14	19	460
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224	6,107

Prefecture of fatal and non-fatal accidents in non organic or organic chemical 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	7	6			1		2	2	7	2	6	2	1	3	2	2	2		1	3	3	3	3	5	63	
Aomori	2	1					1				2	1	1									1	1		10	
Iwate	1	2	3				1		1	1	1		2			1							1		14	
Miyagi			1		2		2	3	2	1	2	1	5	2			1	1	1				1	2		27
Akita		1	1		1					5			1	3		2		2	1					3		20
Yamagata			1		1		1	2	1					1	1	2	1	3	1	1				1		17
Fukushima	13	9	7		10		14	13	18	7	14	9	10	3	7	3	5	12	4	6	9	5	14	12	204	
Ibaraki	7	17	12		14		14	15	13	16	13	11	12	15	15	8	16	11	8	6	11	10	12	19	275	
Tochigi	5	2	1		2		1	1	3	4	4	1	3	5	4		1	3	1		5	1	4	1	52	
Gunma	4	15	9		4		10	4	10	7	5	4	7	3	4	5	2	4	3	7	5	6	3	6	127	

Shimane	1				1		1			1	1	2			1					1	1					10
Okayama	6	4	12		9		4	12	12	7	2	4	6	5	5	8	8	8	2	5	4	6	6	7		142
Hiroshima	6	3	8		5		6	6	7	6	4	4	4	5	3	2	5	5	9	5	7	3	2	5		110
Yamaguchi	15	19	9		12		19	15	17	12	5	8	11	13	10	11	16	11	10	12	16	12	15	10		278
Tokushima	8	6	6		8		9	5	13	7	6	3	9	4	1	1	6	3	4	5	9	2	6	5		126
Kagawa	8	3	4		7		8	1	5	4	4	1	2	2	2		2	2		4	5	2	4	4		74
Ehime	1	5	5		6		6	3	4	3	1	5	7	6	2		2		3	3	2	5	7	3		79
Kochi		2	1		2		1	1		1		1		1	1		1	2	1		1	2	1			19
Fukuoka	18	17	11		11		9	6	17	10	10	10	12	7	5	6	6	10	6	11	8	8	15	8		221
Saga	1	2			1		1	4	2	2	2	2	1	3		2			2	2	1		1			29
Nagasaki			1					4					1	1	1					1	1			2		12
Kumamoto	1	2	2				3	3	3	1	2	1		2	1		7	1			1	1	2	1		34
Oita	5	1	3		2		1	5		1	1	2	3	4	2	2	1	3	1	1	2	3	7			50
Miyazaki		2					3		1		2	2		1	3		2	1		1	1	5	3	1		28
Kagoshima	2	4			3		3	1	2	1	2	1				1	1	1		3		1	1	2		29
Okinawa			1									2						1	2	1		1				8
total	306	331	304	294	303	307	306	300	312	264	216	227	239	204	190	221	190	242	198	215	235	211	268	224		6,107

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more.

Data of 2022 year do not include Covid-19 cases. Data of 2020 & 2021 year include Covid-19 cases. Fatal and non-fatal data are same situation.

Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

drown																	1							1	
contact to high/low-temperature	1	1																						2	
contact to harmful substance	3	1	3		1	2	1			1		1	1			2	1	2		2		1		22	
electric shock		1			1										1									3	
explosion		4				2				1	5		1	1		3								17	
burst																									
fire					1								3				1							5	
traffic accident (public road)				1												1								2	
traffic accident (others)																									
reaction to motion/improper motion																									
others			1														1							2	
unclassifiable															1									1	
total	5	9	6	3	3	6	3	1	1	4	6	2	3	4	3	6	6	4		3	1	1		5	85

Causal agents (large) of fatal accidents in non organic or organic chemical products in 1999-2022

environment	1	1	2			1	1								1				1	1			9		
high/cold temperature environment																									
other environments																									
other causal agent																									
no causal agent																1								1	
unclassifiable														1										1	
total	5	9	6	3	3	6	3	1	1	4	6	2	3	4	3	6	6	4		3	1	1		5	85

Workers age of fatal accidents in non organic or organic chemical 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
20-29		1	1	1		2	1						1	1	2	2				1				1	14
30-39	1	3	1		1	1				2	3	1	1	1		2	4	2		1				1	25
40-49	2	2	2			1				1	2	1				1	1			1	1				15
50-59	1	3	2	2	2	2	2	1	1	1			1	1		1								1	21
60 years old or more	1													1	1		1	2					1	2	9
total	5	9	6	3	3	6	3	1	1	4	6	2	3	4	3	6	6	4		3	1	1		5	85

Shimane																									
Okayama																									
Hiroshima					1																		1		
Yamaguchi											1	1			2								4		
Tokushima																									
Kagawa																									
Ehime																									
Kochi																									
Fukuoka					1														1				2		
Saga																									
Nagasaki																									
Kumamoto															1								1		
Oita																									
Miyazaki																									
Kagoshima																				1			1		
Okinawa																									
total	5	9	6	3	3	6	3	1	1	4	6	2	3	4	3	6	6	4		3	1	1		5	85

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