

contact to harmful substance	3	1	4		3	3	2	4	2			1	1	2	13	1			1		1	1	4	3	50
electric shock			1											2											3
explosion		1	1					2							1			1							6
burst	1	1	1			1				1	1						1	1							8
fire			1			1		2				1			1		1						2		9
traffic accident (public road)	17	23	30	46	39	29	37	25	55	39	28	42	22	32	35	30	18	26	27	26	27	25	30	30	738
traffic accident (others)	3	3	2	1			1	2	3	1	1		2	1	2	1		1		2	2	3	1	1	33
reaction to motion/improper motion	107	98	119	111	130	130	149	146	170	161	162	147	155	183	195	174	206	229	261	251	329	372	422	410	4,817
others	3	3	2	1	2	4	4	3	2	6	5	6	10	6	4	3	5	8	8	8	8	14	73	13	201
unclassifiable	1	1	2	2		1	1	1	2	1	1	2	2	4	2	5	1	2	2	1	3	2		4	43
total	970	958	1,066	992	1,060	1,057	1,139	1,184	1,154	1,206	995	1,033	1,062	1,063	1,096	1,137	1,165	1,230	1,398	1,442	1,561	1,662	1,863	1,773	29,266

Causal agents (large) of fatal and non-fatal accidents in land cargo handling service 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	38	34	28	23	29	36	36	38	33	24	29	25	26	24	22	27	27	20	23	20	27	27	26	24	666
crane, conveying machine	364	391	427	430	421	430	445	463	443	441	313	365	333	319	364	362	315	356	381	396	392	406	378	425	9,360
other equipment	146	141	162	137	165	154	185	204	196	230	201	194	213	230	231	256	259	280	328	343	358	427	491	447	5,978

temporary buildings, establishments	140	136	147	150	160	130	185	171	161	191	170	182	196	193	169	203	234	233	263	292	315	289	343	303	4,956
substance, material	86	63	71	56	70	72	50	63	60	55	40	31	37	41	57	44	44	50	59	31	53	35	52	44	1,264
load	151	141	169	143	154	167	177	184	187	199	190	171	177	176	180	156	201	189	228	231	255	306	342	319	4,793
environment	5	2	12	12	9	8	4	11	7	15	5	14	19	18	18	25	12	22	24	44	31	34	23	38	412
others	40	50	50	41	52	60	57	50	67	51	47	51	61	62	55	64	73	80	92	85	130	138	208	173	1,837
total	970	958	1,066	992	1,060	1,057	1,139	1,184	1,154	1,206	995	1,033	1,062	1,063	1,096	1,137	1,165	1,230	1,398	1,442	1,561	1,662	1,863	1,773	29,266

Causal agents (middle) of fatal and non-fatal accidents in land cargo handling service 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							2				1	1						2		7
power transmission mechanism	2	1			3	1	2	1	2		3	4	2		1		4	1	2	2	2	1	4	4	42
woodworking machine	11	14	10	7	3	9	8	11	7	5	7	6	7	10	6	10	7	7	1	4	3	6	2	3	164
construction machine	5	6	4	3	5	3	4	4	3	4	1	2	4	4	2		3	2	5	2	1	1	3		71
metal manufacturing machine	9	3	1	2	2	4	3	5	5	2	2	3		2	2		1	1	2	1	2	2	1	2	57

general machine	11	10	13	11	15	19	19	17	16	13	16	8	13	8	11	16	11	9	13	11	19	17	14	15	325
mobile silviculture machine																									
crane	31	30	27	34	20	17	19	16	16	25	16	10	10	19	10	12	15	8	12	9	18	9	18	14	415
conveying machine	316	340	382	368	379	396	396	426	380	382	258	317	310	280	326	320	285	329	350	354	356	366	333	385	8,334
vehicle	17	21	18	28	22	17	30	21	47	34	39	38	13	20	28	30	15	19	19	33	18	31	27	26	611
pressure vessel	2	1	4		1			1	1		2					1				1			1		15
chemical facilities					1		1			1															3
welding equipment			1	2	1											1						2			7
kiln, caldron			1		1	1		1	1			1							1						7
electric equipment		1	1				1	1	1	1	1			2		2		1		2		1	1	5	21
human power machine, tools	47	66	67	61	54	68	67	87	80	109	102	95	91	111	101	122	123	121	173	179	164	221	239	249	2,797
tools	81	62	68	61	89	73	93	90	101	98	66	80	104	97	102	116	115	129	125	125	160	157	198	155	2,545
other equipments, facilities	16	11	20	13	18	12	23	24	12	21	30	18	18	20	28	14	21	29	29	36	32	48	52	38	583
temporary buildings, establishments	140	136	147	150	160	130	185	171	161	191	170	182	196	193	169	203	234	233	263	292	315	289	343	303	4,956
hazards, harmful substances	4		3		5	3	2	3	2	2			1	2	14	4	2	1	1	2	2	2	6	2	63

chamfering machine, router, woodworking milling machine																									
chain saw																					1			1	
other woodworking machines			3			1	3	1	2	3	2	5	6	3	4	2	4	1	2	2	2	2	1	1	48
leveling, transporting or loading machine			2		3	1	2		2			1	2			2	1	3				1		20	
excavating machine			2		1	1	2	1	1		1	2	2	1					1	1	1	1		18	
foundation work machine																									
hardening machine									1							1	1							3	
demolition machine																									
vehicle for high lift work									1	1					1				2	1				6	
other construction machines					1		2				1	1	1									1		7	
lathe																									
drill press, milling machine							1																	1	
grinding machine, buffing machine					1			1			1	1							1	1			2	8	

boot board			32		30		19	31	17	33	26	27	38	31	17	43	35	37	44	34	45	36	51	58	684
passage			39		48		70	46	50	59	64	76	77	69	79	80	81	102	121	149	143	135	149	113	1,750
building, establishment			22		24		32	27	33	28	26	23	25	30	27	21	39	24	33	37	31	26	32	32	572
other temporary buildings, establishments			25		20		28	24	21	23	15	21	16	20	17	17	24	18	23	19	35	37	29	31	463
explosive substance								1												1					2
inflammable substance			1		1										1	1	1	1							6
inflammable gas					1		1																1	1	4
harmful substance			1		3			2	2	1					12				1		1	1		1	25
radiation																									
other hazards, harmful substances			1				1			1			1	2	1	3	1			1	1	1	5		19
metal material			44		33		24	35	34	32	18	20	20	17	18	19	20	25	24	19	26	15	21	26	490
lumber, bamboo			14		20		15	15	14	13	10	7	7	12	12	7	7	9	19	7	9	8	9	7	221
stone, sand, substance					3		2		1	2			1		1	2				2	2				16
other materials			10		9		7	10	9	6	12	4	8	10	12	12	15	15	15	1	14	10	16	9	204
load			167		147		168	175	177	189	185	164	172	166	173	149	194	186	222	226	249	301	339	308	4,057
machine/equipment as load			2		7		9	9	10	10	5	7	5	10	7	7	7	3	6	5	6	5	3	11	134

natural ground, rock					2		1	1	1	1			2			1		1	1	1	1	2		1	16
standing tree											1					1				1	1	1	1		6
water					1								4	1	1				1	2		2			12
abnormal environment			1						1		1	1	2						1						7
high/cold temperature environment			2		3			4	3	7	1	6	3	8	9	11	5	18	14	20	21	21	11	19	186
other environments			9		3		3	6	2	7	3	7	9	7	8	12	7	3	8	19	8	8	11	18	158
other causal agent			17		4		9	4	11	9	5	7	14	10	11	7	14	12	16	5	17	19	79	28	298
no causal agent			31		47		48	44	55	41	39	43	45	48	41	53	57	66	73	79	107	116	127	144	1,304
unclassifiable			2		1			2	1	1	3	1	2	4	3	4	2	2	3	1	6	3	2	1	44
total	970	958	1,066	992	1,060	1,057	1,139	1,184	1,154	1,206	995	1,033	1,062	1,063	1,096	1,137	1,165	1,230	1,398	1,442	1,561	1,662	1,863	1,773	29,266

Workers age of fatal and non-fatal accidents in land cargo handling service 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	25	26	27	18	24	28	28	19	27	21	12	16	21	19	23	19	21	28	25	20	31	31	33	32	574
20-29	233	230	235	205	250	213	233	202	190	221	165	147	151	138	128	139	150	156	188	187	187	212	258	242	4,660
30-39	212	222	253	252	268	270	312	329	316	294	245	236	246	240	244	241	222	211	247	233	259	219	275	266	6,112
40-49	176	188	194	194	192	203	217	228	265	289	232	263	283	306	321	346	341	357	399	386	410	435	483	388	7,096
50-59	253	220	269	249	264	243	248	318	259	260	216	244	212	227	253	234	276	296	347	406	419	503	527	515	7,258

May	79	65	100	88	80	85	83	101	106	110	84	83	79	92	88	103	102	76	120	104	113	139	154	138	2,372
June	66	76	86	66	96	110	111	84	88	111	87	75	100	99	83	89	122	103	114	108	133	158	157	147	2,469
July	96	83	100	100	81	95	108	89	89	106	94	82	89	94	103	106	103	112	107	147	170	147	176	170	2,647
August	82	82	81	71	94	63	107	111	99	83	71	98	84	100	99	83	106	111	122	112	134	142	176	151	2,462
September	76	87	81	87	101	85	100	104	101	75	73	78	91	76	114	109	99	102	144	154	135	145	187	149	2,553
October	80	85	99	80	89	95	110	106	92	110	88	78	89	89	82	91	99	109	138	133	145	138	129	149	2,503
November	86	83	77	91	92	84	102	112	85	81	64	95	96	93	85	86	80	101	98	121	121	139	145	132	2,349
December	92	106	69	76	91	74	89	106	100	76	100	77	85	85	85	105	84	99	120	128	153	143	141	151	2,435
total	970	958	1,066	992	1,060	1,057	1,139	1,184	1,154	1,206	995	1,033	1,062	1,063	1,096	1,137	1,165	1,230	1,398	1,442	1,561	1,662	1,863	1,773	29,266

Prefecture of fatal and non-fatal accidents in land cargo handling service 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	45	49	37		31		45	57	40	69	38	39	60	47	44	36	43	46	59	44	46	54	61	51	1,041	
Aomori	4	5	3		3		3	4	7	2	3	10	1		1	1	1	2	1	1	1		1	2	56	
Iwate	2	1	2		1		2	1				1	4		1	1	1	1	4	1	1		2	3	29	
Miyagi	4	4	11		22		12	14	5	19	18	17	14	12	6	12	14	13	11	18	11	12	42	16	307	
Akita	1	1	1		1		3					1			2									1	11	
Yamagata		1	3		2		1		2	3				3	2	1							1	4	1	24
Fukushima	15	6	11		11		9	9	8	10	2	3	8	12	14	11	14	8	8	11	12	7	7	12	208	
Ibaraki	23	16	19		23		34	30	31	29	29	27	31	28	30	35	23	21	31	32	42	42	48	45	669	
Tochigi	3	9	8		22		10	14	12	18	33	49	19	19	11	12	18	14	18	18	19	21	28	26	401	
Gunma	15	14	8		25		14	21	12	11	5	11	12	15	21	14	19	27	23	15	17	17	24	18	358	

Saitama	56	76	76		95		120	155	145	126	112	120	139	114	120	135	121	116	136	121	169	199	167	190	2,808
Chiba	103	71	93		73		99	122	140	110	101	111	110	121	144	145	138	168	196	190	192	198	220	239	3,084
Tokyo	103	95	122		88		99	83	83	101	95	78	77	88	104	87	80	94	127	125	133	126	131	131	2,250
Kanagawa	91	98	85		106		122	105	101	128	112	113	122	138	134	113	167	165	196	198	232	262	340	284	3,412
Niigata	2	4	4		3		3	2	5	5	2	1	2		4	5	5	7	1	7	2	5	2	4	75
Toyama	3	3	3		7		2	4	7	1	2	7	2	6	2	4	3		3	2	5	3	2	10	81
Ishikawa	2	3	2		4		1	1	2	3	1	1	2	4	1		5	4	7	9	4	7	4	4	71
Fukui	3		4				2	1	2	3		1	2	4	2	3	3	1	1		2	1	4		39
Yamanashi	1				3		2		3	3					1	1	1	1	1	1	2	1	1	3	25
Nagano	2	5	6		4		1	3	6	3	6	3	2		1	1	5	4	5	3	5	2	4	3	74
Gifu	6	10	12		11		9	19	20	22	11	12	9	6	6	14	11	9	11	19	13	7	16	13	266
Shizuoka	15	16	32		23		24	16	25	31	8	8	21	19	12	27	25	23	25	36	36	38	20	31	511
Aichi	70	86	82		85		100	93	101	113	75	87	106	123	95	112	114	93	117	132	149	144	119	129	2,325
Mie	14	20	19		25		18	15	32	23	14	24	22	13	11	24	25	22	10	20	20	24	28	24	447
Shiga	3	8	4		6		6	5	9	6	2	4	8	5	9	3	1	8	4	9	6	2	10	10	128
Kyoto	9	3	11		14		17	15	20	12	6	9	12	10	7	16	12	8	7	12	10	14	42	41	307
Osaka	143	134	158		137		165	151	126	138	119	118	110	117	101	110	129	136	161	174	165	186	162	153	3,093
Hyogo	73	63	80		55		59	53	43	49	44	41	29	30	60	41	36	53	64	59	52	62	85	75	1,206
Nara	5	4	2		1		4	2		4	6	3	1	1	1	4	1	3	1	9	1	2	3	4	62
Wakayama	1	2	3				1		2	1		1	4	2	2	2	3	5	5	5	6	5	4	4	58
Tottori	2				2				3			1	3			2	1	1		1	2		1		19
Shimane								1		1	1		1	2								1			7

Okayama	15	13	10		19		11	17	25	12	17	14	8	6	12	6	10	16	13	14	14	18	16	13	299
Hiroshima	19	9	13		21		15	21	15	11	23	15	15	16	22	25	16	21	19	24	25	23	25	25	418
Yamaguchi	13	7	9		7		14	13	3	4	3	9	8	15	6	9	3	12	5	6	4	7	4	3	164
Tokushima	8		4		8			3	2	3	3	1		1	3	2			1			1	3	2	45
Kagawa	12	9	5		4		2	10	5	6	7	5	11	5	5	9	6	8	13	7	13	8	6	7	163
Ehime	7	6	9		6		11	6	8	3	4	4	6	3	7	6	5	7	4	5	8	7	8	8	138
Kochi	10	8	17		8		2	4	2	1		2	1		3	1		4	3		2	1	3		72
Fukuoka	29	52	61		51		58	57	62	53	47	47	45	51	59	64	61	55	60	70	98	105	129	123	1,437
Saga	10	17	9		9		7	23	19	27	18	9	11	9	12	19	19	24	19	17	19	27	61	21	406
Nagasaki	4	10	5		4		7	4	1	7	3	1	4	5	4	6	7	4		3	1	2	4	9	95
Kumamoto	4	7	9		5		6	7	3	6	4	6	9	2	6	4	5	3	3	5	6	3	4	2	109
Oita	4	3	4		2		4	2	3	3	2	3			1	1	1	1	3	1		1	2	2	43
Miyazaki	7	4	3		19		6	11	8	16	6	5	3	4	4	5	3	6	6	5	4	8	8	13	154
Kagoshima	4	6	5		10		5	7	2	6	11	6	6	3	1	4	8	10	10	8	8	4	3	11	138
Okinawa	5		2		4		4	3	4	4	2	5	2	4	2	4	2	6	6	5	4	4	5	7	84
total	970	958	1,066	992	1,060	1,057	1,139	1,184	1,154	1,206	995	1,033	1,062	1,063	1,096	1,137	1,165	1,230	1,398	1,442	1,561	1,662	1,863	1,773	29,266

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.

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

burst																									
fire								2												2					4
traffic accident (public road)	1	2	2	3		1	1	2	3	1	1					1					4			22	
traffic accident (others)	1																							1	
reaction to motion/improper motion																									
others												2				1	1	1	1	1				7	
unclassifiable																									
total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174

Causal agents (large) of fatal accidents in land cargo handling service 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			1			2				1		1				1	1						9
crane, conveying machine	7	4	5	7	5	5	5	6	6	2	2	6	4	2		3	3	3	4	2	2	9	3	5	100
other equipment		1	1	1				1	1					1			1		1		2				10
temporary buildings, establishments		3					1	1	1	2	1		2		1						1				13
substance, material	1		1			2																			4
load	2		1	1		2	1	1	1	2	2	1					2	1		1	1			1	20
environment				1					1			1	4			1				2					10
others						1					1		1			1	1	1	1	1					8
total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174

injection molding machine																									
food manufacturing machine																									
printing machine																									
industrial robot																									
other general power machines											1						1	1					3		
felling machine																									
mobile logging machine																									
skyline yarding machine																									
other mobile silviculture machine																									
crane					1												1			1	1			4	
mobile crane	1																							1	
derrick crane																									
elevator, lift										1														1	
cargo lifting appliance																									
gondola																									
lumberyard equipment, logging cableway																									
simple skyline yarding equipment																									
other powered crane																									
truck	3	2	2	2	3	1	2	2		1	1	1	1	1		2					3		1	28	
forklift	2	2	3	4	1	3	3	3	3			5	3	1		1		2	3	2	1	3	2	4	51

inflammable gas																									
harmful substance																									
radiation																									
other hazards, harmful substances																									
metal material						2																			2
lumber, bamboo			1																						1
stone, sand, substance																									
other materials	1																								1
load	2		1	1		1	1	1	1	2	2	1					2	1		1	1			1	19
machine/equipment as load						1																			1
natural ground, rock																									
standing tree																									
water				1									4												5
abnormal environment													1												1
high/cold temperature environment									1							1				2					4
other environments																									
other causal agent																									
no causal agent											1		1			1	1	1	1	1					7
unclassifiable						1																			1
total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174

Workers age of fatal accidents in land cargo handling service 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							1					1				5
20-29	3	1		1					1	2		1				2	1	1		1		2			16
30-39	1	4	4	2	1	2	1	2	2	1	1	2	4	2			1	1	2		1				34
40-49	2		3	2	1	1	1	2	4		3		5			2		2	2		2			1	33
50-59	4	4	1	4	4	3	2	5		2		2	1	2	1		2	1	3	2	3	4	2	1	53
60 years old or more	1			1		4	2	1	2	1	2	4	1			1	2	1		3		2	1	4	33
total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174

Workers' number of workplace of fatal accidents in land cargo handling service 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	3	1	2		1	5	1	5		1	2	3	2			2	2	1	1	1	3	1		1	38
10-29	2	5	1	5	4	2	2	4	4	3		3	4		1	1	1	3	2	1		2		1	51
30-49	2	1	2		1	2	2		1	2	2	2	3	1			2		1	2		4	1	3	34
50-99	2	1	2	2		1	1	2	4				1			1			1	1		1	1		21
100-299	1	1	1	2					1		2	1		2			1	2		1	1	1	1	1	19
300 workers or more	1			1			1						1	1		1	1		2		2				11
total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174

total	11	9	8	10	6	10	7	11	10	6	6	9	11	4	1	5	7	6	7	6	6	9	3	6	174
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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