

Relation between causal agents and code no. 11 contact to high/low-temperature as type of Fatal and non-fatal accidents in 1999-2020

L	M	S	causal agent	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	total
		111	engine		6	3		5		5	4	5	2	3	3	1	2	4	3	1	3	1	4	2	2	59
	11		engine	8	6	3	4	5	11	5	4	5	2	3	3	1	2	4	3	1	3	1	4	2	2	82
		121	power transmission mechanism							4				3												7
	12		power transmission mechanism	1					1	4				3												9
		131	circular sawing machine																							
		132	band sawing machine																							
		133	wood planer machine																					1		1
		134	hollow chisel mortiser, wood borer														1									1
		135	chamfering machine, router, woodworking milling machine																							
		136	chain saw		1									1								1			1	4
		139	other woodworking machines		1			1		1						2	3	1	2	1	1					13
	13		woodworking machine	2	2		1	1	3	1				1		2	4	1	2	1	1	1		1	1	25
		141	leveling, transporting or loading machine		7	7		2		13	4		6	4	3	10	1	7	2	1	2	4	4		1	78
		142	excavating machine		23	18		10		10	3	14	9	8	5	3	7	7	4	2	2	4	2	5	2	138
		143	foundation work machine			1		1			1															3
		144	hardening machine		1							1										1				3
		145	demolition machine		2	2				1	1		2	1			1			1			1			12
		146	vehicle for high lift work		1	1														1					1	4
		149	other construction machines		4	1		3		3	6	4	2	1	1	2	2	1	2		1	3	1	1	1	39

	14	construction machine	37	38	30	19	16	29	27	15	19	19	14	9	15	11	15	8	5	5	12	8	6	5	362	
		151	lathe												1			1							2	
		152	drill press, milling machine																1	1					2	
		153	grinding machine, buffing machine		2		1		5	3	1	4	2		2	4	2	4	2	3	3	3	4	2	47	
		154	power press		2		1		2	2	1				1	1	3	1		1				2	17	
		155	forging pressure hammer		1												1						1		3	
		156	shearing machine																							
		159	other metal manufacturing machines		11	10	6		9	12	11	7	3	5	7	2	7	5	3	2	4	10	4	6	124	
	15	metal manufacturing machine	20	16	10	12	8	14	16	17	13	11	5	5	11	7	12	12	6	7	7	13	9	10	241	
		161	centrifugal machine			4			1	2		1			2				1				1		12	
		162	mixer, grinder		1	2		2	2	1	2	2		2	1	1	4	1	3	1		4	3	2	34	
		163	roll machine (except printingroll machine)		4	5	4		6	4	4	2		4	1		1		1	3	4	1	2		46	
		164	injection molding machine		13	10		10	10	7	9	9	11	12	8	8	8	9	4	7	4	10	8	5	162	
		165	food manufacturing machine		66	62		54		56	58	60	69	75	88	94	67	77	62	62	79	75	72	70	59	1,305
		166	printing machine		2				1			3		1					1	1	1	1			11	
		167	industrial robot			1		1		1	1				5		2	2	1	1	1	1		1	19	
		169	other general power machines		94	82		77		91	90	64	73	71	63	61	54	81	53	53	49	48	51	43	51	1,249
	16	general machine	157	180	166	164	148	172	168	162	140	160	157	170	172	130	173	127	126	141	133	140	127	118	3,331	
		171	felling machine																1						1	
		172	mobile logging machine																	2	1	1	1		5	
		173	skyline yarding machine																							
		179	other mobile silviculture machine																	1					1	

	17	mobile silviculture machine																1	3	1	1	1		7	
1		machine	225	242	209	200	178	230	221	198	177	192	183	187	201	154	205	152	140	160	155	166	146	136	4,057
		211 crane		5	4		2		2	1	3	1	2	1	1	1	1	1	1	4			5	1	36
		212 mobile crane		4	4		2				3	2					1		1		1	2	1	1	22
		213 derrick crane																							
		214 elevator, lift		1						2				1				1			1		1		7
		215 cargo lifting appliance																							
		216 gondola																							
		217 lumberyard equipment, logging cableway																							
		218 simple skyline yarding equipment																							
		219 other powered crane					3					1				1				2	1				8
	21	crane	5	10	8	6	7	10	2	3	6	4	2	2	1	2	2	2	2	6	3	2	7	2	94
		221 truck		35	45		24		23	16	22	16	12	14	24	17	17	8	10	11	12	16	10	11	343
		222 forklift		9	6		4		5	5	9	6	2	3	1	5	4	8	3	6	8	4	3	1	92
		223 railway equipment																1					1		2
		224 conveyor		2	1		2		2	1	2	2		3	3	3	2	1		1	1	1	2	1	30
		225 loader		2	3		1		2	2		1		2	1			2	1				1		18
		226 straddle carrier																			1				1
		227 rough terrain hauler			1							1	2	1				1							6
		229 other powered conveying machines		2	1		2		1	5	2	3	2	2	2		1	1	3	1		1			29
	22	conveying machine	48	50	57	48	33	46	33	29	35	29	18	25	31	25	24	22	17	19	22	22	17	13	663
		231 cars, bus, motorcycle		30	32		26		31	31	25	16	16	29	20	22	17	17	16	11	11	16	15	12	393
		232 railway vehicle			1		1						1				1	1							5
		239 other vehicles		1	2		1			1				2		1		2		1		3		2	16
	23	vehicle	29	31	35	39	28	39	31	32	25	16	17	31	20	23	18	20	16	12	11	19	15	14	521
2		crane, conveying machine	82	91	100	93	68	95	66	64	66	49	37	58	52	50	44	44	35	37	36	43	39	29	1,278
		311 boiler		12	15		6		24	17	25	12	15	11	9	10	13	18	6	7	9	9	11	8	237
		312 pressure vessel		29	30		23		17	22	15	19	19	13	16	15	14	9	17	18	25	12	15	13	341

		319	other pressure vessels		15	14		11		10	7	6	5	14	6	4	6	5	11	9	10	2	8	3	6	152
	31		pressure vessel	55	56	59	49	40	41	51	46	46	36	48	30	29	31	32	38	32	35	36	29	29	27	875
		321	chemical facilities		11	7		6		17	9	7	6	4	5	7	4	2	5	4	5	9	10	8	3	129
	32		chemical facilities	13	11	7	5	6	8	17	9	7	6	4	5	7	4	2	5	4	5	9	10	8	3	155
		331	gas welding equipment		69	61		54		58	28	50	49	56	40	46	39	38	37	35	30	33	40	36	29	828
		332	arc welding equipment		26	47		24		30	28	37	45	41	27	33	21	32	36	30	40	33	34	30	32	626
		339	other welding equipment		15	8		6		9	11	8	9	6	3	7	9	5	7	2	3	6	3	13	6	136
	33		welding equipment	97	110	116	99	84	92	97	67	95	103	103	70	86	69	75	80	67	73	72	77	79	67	1,878
		341	kiln, caldron		133	146		143		131	135	116	129	133	141	107	117	137	96	99	85	122	146	172	128	2,416
		342	industrial dryer		5	8		4		4	8	3	4	4	3	1	4	5	3	1	1	4	2	7	1	72
		349	other kiln, caldron		21	23		26		9	21	19	16	17	14	12	14	15	26	27	27	17	18	18	13	353
	34		kiln, caldron	129	159	177	142	173	147	144	164	138	149	154	158	120	135	157	125	127	113	143	166	197	142	3,259
		351	transmission		9	2		8		5	6	6	4	4		3	1	1	1	2	5	4	1	6	7	75
		352	electric power facilities		11	19		17		9	7	20	19	10	17	12	14	7	13	10	10	11	14	4	9	233
		359	other electrical equipment		25	16		23		20	13	18	19	11	11	14	9	11	14	10	13	11	11	14	14	277
	35		electric equipment	26	45	37	43	48	40	34	26	44	42	25	28	29	24	19	28	22	28	26	26	24	30	694
		361	human power cranes																						1	1
		362	human power hauling equipment		4	8		6		6	8	10	8	9	11	10	10	9	6	9	3	8	4	11	10	150
		363	human power machine			1				1	1	1	1		1					1	1		1			9
		364	hand tool		38	34		23		28	17	26	25	32	27	22	30	26	36	34	29	21	33	31	41	553
	36		human power machine, tools	22	42	43	36	29	43	35	26	37	34	41	39	32	40	35	42	44	33	29	38	42	52	814
		371	ladder		1	3		2		3		3	6	2	2	3	3	5	1	2	5	3	5	2	2	53
		372	slinging tool					1		1		1	2		1			1	1			1			1	10
		379	other tools		135	174		200		191	220	242	250	230	205	212	245	265	247	261	307	358	280	337	295	4,654
	37		tools	156	136	177	164	203	234	195	220	246	258	232	208	215	248	271	249	263	312	362	285	339	298	5,271
		391	other equipments, facilities		358	410		339		390	414	391	461	414	468	438	405	419	450	450	500	458	476	432	413	8,086
	39		other equipments,	339	358	410	388	339	414	390	414	391	461	414	468	438	405	419	450	450	500	458	476	432	413	9,227

5	substance, material		782	743	770	763	741	714	693	701	680	613	578	581	650	657	635	626	591	620	604	526	555	465	14,288
	611	load		17	21		34		25	23	19	28	28	29	28	23	22	20	26	24	28	25	25	29	474
	612	machine/equipment as load			2		1		1	2	2	1			1			3		1	1		1	2	18
	61	load	19	17	23	27	35	23	26	25	21	29	28	29	29	23	22	23	26	25	29	25	26	31	561
6	load		19	17	23	27	35	23	26	25	21	29	28	29	29	23	22	23	26	25	29	25	26	31	561
	711	natural ground, rock								1	1			1	1		1							1	6
	712	standing tree									1			1					1						3
	713	water		44	33		46		43	34	55	50	38	22	29	25	39	41	37	28	31	58	60	62	775
	714	abnormal environment		3	1		4		4		3	7	1	9	8	9	4	3	4	3	5	7	6	3	84
	715	high/cold temperature environment		258	376		285		280	362	393	364	232	724	522	564	681	636	590	613	637	1,352	999	1,125	10,993
	719	other environments		18	18		28		23	31	22	26	15	25	18	16	18	34	21	19	25	25	12	12	406
	71	natural environment	296	323	428	394	363	424	350	428	475	447	286	782	578	614	743	714	653	663	698	1,442	1,077	1,203	13,381
7	environment		296	323	428	394	363	424	350	428	475	447	286	782	578	614	743	714	653	663	698	1,442	1,077	1,203	13,381
	911	other causal agent		283	256		248		207	220	171	173	138	140	167	153	147	162	158	171	171	161	176	125	3,427
	91	other causal agent	292	283	256	252	248	242	207	220	171	173	138	140	167	153	147	162	158	171	171	161	176	125	4,213
	921	no causal agent		20	15		11		9	13	10	20	18	14	6	14	7	8	7	8	7	20	27	26	260
	92	no causal agent	10	20	15	12	11	11	9	13	10	20	18	14	6	14	7	8	7	8	7	20	27	26	293
	999	unclassifiable		12	12		6		7	5	2	9	7	5	4	4	4	6	2		1	5	4	1	96
	99	unclassifiable	13	12	12	15	6	18	7	5	2	9	7	5	4	4	4	6	2		1	5	4	1	142
9	others		315	315	283	279	265	271	223	238	183	202	163	159	177	171	158	176	167	179	179	186	207	152	4,648
0	total		2,624	2,718	2,911	2,750	2,641	2,860	2,613	2,697	2,660	2,692	2,344	2,866	2,704	2,678	2,870	2,810	2,677	2,831	2,889	3,546	3,250	3,099	61,730

Data of 2011 year include Industrial accidents caused by Great East Japan Earthquake in 2011.

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

Return to <https://www.jisha.or.jp/english/statistics/2020enfctes.html>