

Relation between causal agents and code no. 19 reaction to motion/improper motion 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		7	1		2		1	4		4	1	3		1	2	1	5	5	1	1	3	1	43
	11		engine	3	7	1	2	2	3	1	4		4	1	3		1	2	1	5	5	1	1	3	1	51
		121	power transmission mechanism		2	2		3		4		2	1	1	1		2	2	1	2	1	2		1	1	28
	12		power transmission mechanism	1	2	2	1	3	1	4		2	1	1	1		2	2	1	2	1	2		1	1	31
		131	circular sawing machine		1	2		1		1	1	4	1	2	1	1		1	1	1		1		1	1	21
		132	band sawing machine														1									1
		133	wood planer machine		1	2		1		1							1				1					7
		134	hollow chisel mortiser, wood borer		2	1		1		1	1	3	1		1				2	1	1					15
		135	chamfering machine, router, woodworking milling machine																1						1	2
		136	chain saw		5	4		6		4	3	5	6	6	3	6	6	6	3	4	3	6	4	5	2	87
		139	other woodworking machines		14	14		11		4	12	8	11	5	6	7	4	1	5	6	1	4	5	5	4	127
	13		woodworking machine	36	23	23	18	20	8	11	17	20	19	13	11	14	12	8	12	12	6	11	9	11	8	322
		141	leveling, transporting or loading machine		5	7		7		2	3	9	4	6	1	8	3	5		4	10	7	9	6	9	105
		142	excavating machine		10	15		5		10	4	11	7	8	7	12	6	11	6	6	10	10	12	14	17	181
		143	foundation work machine			1		3		1	1	1	1	1	3	1			3	1		2	4		2	25
		144	hardening machine		3	8		3		3		2	5	2	2	4	4		3	5	3	1	2	2		52
		145	demolition machine		4	2		5		5	5	6	1	1	4	3	6	2	2	2	1	1	2	3	6	61
		146	vehicle for high lift work		2	2		2		1		4	2	1	1	1	2	2	4	3		2	1		5	35
		149	other construction machines		16	14		18		11	8	13	7	5	5	14	4	12	11	6	8	4	4	5	3	168
	14		construction machine	50	40	49	37	43	38	33	21	46	27	24	23	43	25	32	29	27	32	27	34	30	42	752
		151	lathe		2	5		3		3	3	6	9	3	3	2	2	1	4	6	2	4	3		2	63
		152	drill press, milling machine		5	9		1		6	5	4	8	2		2	3	2		4	2	3	2	1	3	62
		153	grinding machine, buffing machine		5	6		7		2	7	8	9	7	4	9	7	5	8	8	4	7	7	7	4	121

	154	power press		1	2		1		6	4	3	2		1	3	2	2	1	1	1	4	2	2	1	39
	155	forging pressure hammer		1					1	1									1			2	1		7
	156	shearing machine			1								1		2		1								5
	159	other metal manufacturing machines		22	19		12		11	14	20	10	5	8	16	7	6	17	9	7	6	12	9	17	227
15		metal manufacturing machine	47	36	42	30	24	30	29	34	41	38	18	16	34	21	17	30	28	17	24	26	21	28	631
	161	centrifugal machine			1				1		1	2			1		1			2		1			10
	162	mixer, grinder		2	3		2		2	5	2		2	1	1	1	2	6	3	2	3	2	3	1	43
	163	roll machine (except printing roll machine)			3		3		2		1	5	1	1	3			1	1	1	2	3	3	3	33
	164	injection molding machine		1					2			1	2	3		1					1	2	2		15
	165	food manufacturing machine		6	10		6		13	8	11	9	9	4	7	11	10	10	10	8	17	20	11	9	189
	166	printing machine		5	6		5		3	4	3	4	4	3		3	4	5	1	4	3	2	2	3	64
	167	industrial robot																					2		2
	169	other general power machines		69	83		55		62	85	72	79	68	51	61	39	58	54	44	59	48	55	62	70	1,174
16		general machine	86	83	106	80	71	87	85	102	90	100	86	63	73	55	75	76	59	76	74	85	85	86	1,783
	171	felling machine																	1	2		1	1		5
	172	mobile logging machine																						2	2
	173	skyline yarding machine																	1						1
	179	other mobile silviculture machine																	1				1		2
17		mobile silviculture machine																	3	2		1	2	2	10
1		machine	223	191	223	168	163	167	163	178	199	189	143	117	164	116	136	149	136	139	139	156	153	168	3,580
	211	crane		3	5		11		3	10	8	8	7	3	3	6	3	2	2	5	8	8	4	10	109
	212	mobile crane		11	10		16		5	13	8	4	9	5	11	4	4	6	5	4	7	10	4	13	149
	213	derrick crane																							
	214	elevator, lift			3		1		2	8	5	4	2		2	5	3	3	1	3	2	7	6	7	64
	215	cargo lifting appliance		1	1		1								1			1						2	7
	216	gondola			1				1	2				1							2		1		8
	217	lumberyard equipment, logging		3	1					1							1		1					1	8

		cableway																							
	218	simple skyline yarding equipment																							
	219	other powered crane		1	5		5		1	6	2	3		3	2	5	4	3	2	5	5	2	3	1	58
21	crane		26	19	26	16	34	20	12	40	23	19	18	12	19	20	15	15	11	17	24	27	20	32	465
	221	truck		326	334		323		304	319	340	376	303	299	342	324	312	306	319	310	336	346	340	435	6,294
	222	forklift		28	39		43		33	45	40	40	26	29	28	36	29	28	31	43	50	55	43	43	709
	223	railway equipment			1				1	1	1	1		1	1	1							1		9
	224	conveyor		22	14		16		19	8	23	23	11	20	13	20	22	20	14	17	18	23	18	13	334
	225	loader		3	1		2		1	1		1	1	1	2	3	1		3	1	1		1	4	27
	226	straddle carrier					2			1						1					1				5
	227	rough terrain hauler			1								1							3	1	1			7
	229	other powered conveying machines		17	24		16		13	14	17	22	14	18	22	17	16	14	22	22	9	15	19	9	320
22	conveying machine		420	396	414	363	402	391	371	389	421	463	356	368	408	402	380	368	389	396	416	440	422	504	8,879
	231	cars, bus, motorcycle		130	151		132		206	200	221	224	187	185	217	207	194	207	192	207	224	216	222	201	3,723
	232	railway vehicle		6	4		5		4	4	9	7	5	4	11	7	7	3	3	4	4	4	10	12	113
	239	other vehicles		46	39		42		53	61	44	41	46	40	41	98	59	37	43	76	78	88	72	37	1,041
23	vehicle		173	182	194	173	179	222	263	265	274	272	238	229	269	312	260	247	238	287	306	308	304	250	5,445
2	crane, conveying machine		619	597	634	552	615	633	646	694	718	754	612	609	696	734	655	630	638	700	746	775	746	786	14,789
	311	boiler		2					1	1			1												5
	312	pressure vessel		2	1				1	1	3	2		2	1	1				1	1				16
	319	other pressure vessels		6	8		4		5	3	8	6	2	6	1	6	3	6	8	1	3	2	6	3	87
31	pressure vessel		10	10	9	3	4	2	7	5	11	8	3	8	2	7	3	6	8	2	4	2	6	3	123
	321	chemical facilities		1	1		3		2		1	1				3	3			1		2	1	2	21
32	chemical facilities		2	1	1	1	3	1	2		1	1				3	3			1		2	1	2	25
	331	gas welding equipment		1	1		2		2	1	2	3			1	1	1	2		1	1				19
	332	arc welding equipment		5	3		5		3	1	1				1	1	2		2	1		1	1	2	29
	339	other welding equipment		3	2		1		1	2	3	1	1	1				1			1	1		1	19
33	welding equipment		11	9	6	10	8	3	6	4	6	4	1	1	2	2	3	3	2	2	2	2	1	3	91
	341	kiln, caldron		2	2		6		1	5	2	5	2		1	2	2	2	3	2	1	3	6	2	49
	342	industrial dryer		1	1							1		1	1				2		2	1		1	11
	349	other kiln, caldron		1	3							1	1					2					2		10
34	kiln, caldron		3	4	6	7	6		1	5	2	7	3	1	2	2	2	4	5	2	3	4	8	3	80
	351	transmission		5	3		4		4	3	4	8	3	3	3	7	12	4	8	5	7	7	8	6	104

		substance																							
	513	inflammable gas			1					1													2		
	514	harmful substance			1					1	1					1							4		
	515	radiation																							
	519	other hazards, harmful substances				2		1	1	2		1	2	1			1		3	1	1	2	18		
51		hazards, harmful substances	2	3	4	3	3	1	4	3	3	4	3	3	3	1	3	1	3		3	4	2	6	62
	521	metal material		358	377		320		345	372	362	336	248	267	254	253	237	255	227	211	248	241	247	222	5,380
	522	lumber, bamboo		248	236		190		173	176	159	155	121	114	136	122	125	120	135	113	111	107	113	118	2,772
	523	stone, sand, substance		91	103		89		70	69	71	69	51	55	57	61	58	69	47	39	52	44	49	49	1,193
	529	other materials		227	233		205		180	221	248	172	173	196	160	157	189	216	181	177	153	140	173	159	3,560
52		materials	970	924	949	837	804	756	768	838	840	732	593	632	607	593	609	660	590	540	564	532	582	548	15,468
5		substance, material	972	927	953	840	807	757	772	841	843	736	596	635	610	594	612	661	593	540	567	536	584	554	15,530
	611	load		2,780	3,001		2,764		2,708	2,973	3,407	3,249	2,678	2,669	2,633	2,721	2,517	2,548	2,663	2,885	2,904	3,034	2,960	3,285	54,379
	612	machine/equipment as load		154	234		171		191	189	221	201	166	194	163	192	173	161	132	135	129	133	143	144	3,226
61		load	2,924	2,934	3,235	2,875	2,935	2,756	2,899	3,162	3,628	3,450	2,844	2,863	2,796	2,913	2,690	2,709	2,795	3,020	3,033	3,167	3,103	3,429	66,160
6		load	2,924	2,934	3,235	2,875	2,935	2,756	2,899	3,162	3,628	3,450	2,844	2,863	2,796	2,913	2,690	2,709	2,795	3,020	3,033	3,167	3,103	3,429	66,160
	711	natural ground, rock		119	117		92		72	86	87	78	89	81	90	68	92	72	67	59	87	62	65	72	1,555
	712	standing tree		29	47		32		28	21	22	29	24	32	30	22	25	23	22	24	20	25	21	28	504
	713	water		18	7		7		6	4	3	5	4	6	5	6	10	8	8	3	9	6	5	5	125
	714	abnormal environment		1	3				1		1				2	1		1		8	7	3		2	30
	715	high/cold temperature environment		4	8		2		2	4		2	1	1	4	7	1	3	1	1	6	5	3	2	57
	719	other environments		203	245		243		268	284	317	280	268	310	321	343	370	445	372	343	341	380	395	461	6,189
71		natural environment	373	374	427	337	376	389	376	400	429	395	386	430	452	447	498	552	470	438	470	481	489	570	9,559
7		environment	373	374	427	337	376	389	376	400	429	395	386	430	452	447	498	552	470	438	470	481	489	570	9,559
	911	other causal agent		662	765		736		908	1,069	1,091	1,267	1,023	1,094	1,292	1,152	1,190	1,095	1,267	1,273	1,487	1,288	1,552	1,465	21,676
91		other causal agent	661	662	765	691	736	879	908	1,069	1,091	1,267	1,023	1,094	1,292	1,152	1,190	1,095	1,267	1,273	1,487	1,288	1,552	1,465	23,907
	921	no causal agent		3,178	3,239		3,926		4,301	4,131	4,260	4,494	4,722	4,970	4,892	5,131	4,986	5,234	5,311	5,217	5,997	6,663	6,963	7,807	95,422
92		no causal agent	3,238	3,178	3,239	3,670	3,926	3,782	4,301	4,131	4,260	4,494	4,722	4,970	4,892	5,131	4,986	5,234	5,311	5,217	5,997	6,663	6,963	7,807	106,112
	999	unclassifiable		103	123		95		90	124	151	147	114	96	119	120	87	96	89	36	48	71	38	33	1,780
99		unclassifiable	137	103	123	105	95	108	90	124	151	147	114	96	119	120	87	96	89	36	48	71	38	33	2,130
9		others	4,036	3,943	4,127	4,466	4,757	4,769	5,299	5,324	5,502	5,908	5,859	6,160	6,303	6,403	6,263	6,425	6,667	6,526	7,532	8,022	8,553	9,305	132,149
0		total	11,699	11,440	12,089	11,621	12,180	12,093	12,824	13,576	14,427	14,615	13,127	13,694	14,108	14,191	13,914	14,191	14,420	15,081	16,177	16,958	17,709	19,121	309,255

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/2020enftcs.html>