

Relation between causal agents and code no. 04 struck by flying or falling object 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		14	10		9		6	3	3	4	1	2	2	7	3	1	6	2	8	8	5		94	
	11		engine	4	14	10	7	9	4	6	3	3	4	1	2	2	7	3	1	6	2	8	8	5		109	
		121	power transmission mechanism		8	8		5		6	4	3	13	6	3	3	4	5	1	6	3	4	4	4	3		93
	12		power transmission mechanism	4	8	8	5	5	5	6	4	3	13	6	3	3	4	5	1	6	3	4	4	4	3		107
		131	circular sawing machine		103	103		73		70	66	72	50	49	38	50	36	43	31	26	33	33	22	23	18		939
		132	band sawing machine		14	10		6		5	5	8	6	4	4	1	5	1	1	2	4	3	1	2	6		88
		133	wood planer machine		8	4		7		5	5	4	4	5	4	4	1		1	1	1	1	1	1	1		58
		134	hollow chisel mortiser, wood borer		1	1				1		1		2	1												7
		135	chamfering machine, router, woodworking milling machine		5	6		1		3	1	1	2	1	2	1	1	1	2				3				30
		136	chain saw		21	23		36		34	30	31	24	29	24	22	29	9	21	24	18	17	20	18	19		449
		139	other woodworking machines		89	77		63		49	48	46	54	27	27	34	35	37	33	26	23	28	24	26	24		770
	13		woodworking machine	257	241	224	189	186	163	167	155	163	140	117	100	112	107	91	89	79	79	82	71	70	68		2,950
		141	leveling, transporting or loading machine		33	24		29		29	22	13	17	15	22	18	20	15	10	14	13	10	13	13	17		347
		142	excavating machine		104	85		90		82	56	73	72	56	38	62	46	68	53	38	44	38	37	38	46		1,126
		143	foundation work machine		19	18		14		19	11	12	10	8	4	7	10	4	9	9	10	7	14	6	10		201
		144	hardening machine		5	9		10		4	5	7	7	3	5	3	4	6	4	7	4	4	1	4	4		96
		145	demolition machine		45	42		33		33	25	32	34	37	31	32	26	47	49	53	46	50	39	52	36		742
		146	vehicle for high lift work		1	2		1		1	2		1	2	2	3	1	1				1	3	1	3		25
		149	other construction machines		66	81		53		63	45	46	64	46	33	54	38	42	27	26	27	22	24	20	22		799
	14		construction machine	323	273	261	229	230	206	231	166	183	205	167	135	179	145	183	152	147	144	132	131	134	138		4,094
		151	lathe		45	33		34		29	24	35	21	22	25	30	32	30	21	18	24	14	15	11	14		477

		152	drill press, milling machine		16	18		19		20	23	11	16	17	8	8	6	9	11	7	10	6	11	2	6	224
		153	grinding machine, buffing machine		144	166		149		118	139	123	130	111	121	116	111	98	93	86	99	64	78	77	82	2,105
		154	power press		50	51		48		38	39	55	44	23	23	23	31	32	34	25	31	31	24	25	26	653
		155	forging pressure hammer		15	11		7		8	2	6	11	6	9	4	6	3	5	1	3	2	1	3	1	104
		156	shearing machine		8	5		4		4	3	7	4	6	5	4	3	1	3	3	5	3	1	2	3	74
		159	other metal manufacturing machines		128	89		86		71	81	78	74	37	56	54	65	42	53	44	55	57	37	44	43	1,194
	15		metal manufacturing machine	391	406	373	331	347	346	288	311	315	300	222	247	239	254	215	220	184	227	177	167	164	175	5,899
		161	centrifugal machine		1	4		2		1	5		3	1		2	1		1			2	3		26	
		162	mixer, grinder		19	18		12		10	9	17	14	9	5	11	15	11	6	11	9	6	9	10	11	212
		163	roll machine (except printingroll machine)		11	7		9		7	6	10	8	7	4	5	6	4	5	2	1	5	4	7	5	113
		164	injection molding machine		5	3		9		6	5	5	2	3	6	2	4	5	4	1	2	2	3	3	2	72
		165	food manufacturing machine		27	30		26		24	22	31	25	28	28	32	19	34	18	36	21	24	19	23	30	497
		166	printing machine		5	7		4		10	4	8	7	4	4	3	7	2	2	7	5	1	5	1	1	87
		167	industrial robot		1					1	1	1			1		1	1	3			1	1	1	1	14
		169	other general power machines		329	335		264		260	254	234	257	212	211	220	215	191	168	182	169	175	193	157	172	4,198
	16		general machine	446	398	404	365	326	344	319	306	306	316	264	259	273	269	249	206	240	207	214	236	205	222	6,374
		171	felling machine																9	11	5	2	5	8	40	
		172	mobile logging machine																1			1	2		4	
		173	skyline yarding machine																1	2	2	1			6	
		179	other mobile silviculture machine																		1		1	1	3	
	17		mobile silviculture machine																11	13	8	4	8	9	53	
1			machine	1,425	1,340	1,280	1,126	1,103	1,068	1,017	945	973	978	777	746	808	786	746	669	673	675	625	621	590	615	19,586
		211	crane		315	295		302		322	288	252	307	185	199	208	211	190	201	192	219	190	220	179	177	4,452

		212	mobile crane		170	124		104		128	100	86	96	76	89	78	85	86	88	78	71	63	62	69	68	1,721
		213	derrick crane					1				1					2									4
		214	elevator, lift		14	19		14		13	17	9	8	8	9	10	9	9	2	12	10	5	7	7	8	190
		215	cargo lifting appliance		3	3		3			2	3	2			3	2	2	1	1	3		1	3	2	34
		216	gondola			1					2	1	1	2					1							8
		217	lumberyard equipment, logging cableway		12	4		9		10	5	5	6	9	8	4	7	3	5	3	6		1		2	99
		218	simple skyline yarding equipment																							
		219	other powered crane		43	49		43		51	35	29	40	28	27	27	22	26	27	28	34	25	25	21	17	597
	21	crane		535	557	495	431	476	473	524	449	386	460	308	332	330	338	316	325	314	343	283	316	279	274	8,544
		221	truck		259	280		283		255	247	224	230	188	181	197	212	219	211	183	204	180	163	173	180	4,069
		222	forklift		168	176		168		172	165	135	131	115	105	125	104	119	107	99	110	112	132	107	128	2,478
		223	railway equipment		1	1		1		1	1	1							1			1	3			11
		224	conveyor		41	39		41		30	35	28	24	16	29	29	27	21	17	12	23	24	13	21	22	492
		225	loader		7	2		4		1	4	4		2	1		3	1		1	2	3	3	5		43
		226	straddle carrier		1						1					1										3
		227	rough terrain hauler		1	1				1	1							2	1			1				8
		229	other powered conveying machines		22	30		29		22	28	18	19	14	14	12	18	20	19	11	15	15	13	11	7	337
	22	conveying machine		473	500	529	488	526	473	482	482	410	404	335	330	364	364	382	355	307	354	335	325	320	337	8,875
		231	cars, bus, motorcycle		25	38		20		31	25	24	23	23	20	26	23	23	17	17	21	23	16	18	13	426
		232	railway vehicle		2	3		2		1	1		1		2	3	1	1			1			1		19
		239	other vehicles		7	12		15		10	5	8	9	6	3	1	7	10	8	8	6	9	4	5	5	138
	23	vehicle		39	34	53	39	37	37	42	31	32	33	29	25	30	31	34	25	25	27	33	20	23	19	698
	2	crane, conveying machine		1,047	1,091	1,077	958	1,039	983	1,048	962	828	897	672	687	724	733	732	705	646	724	651	661	622	630	18,117
		311	boiler		1			4		1	2	1		2	4		1		1				1	1		19
		312	pressure vessel		10	7		4		6	2	6	4	4	2	6	1	4	2	2	3	2	2	1		68
		319	other pressure vessels		26	32		27		16	16	10	18	17	11	13	11	12	11	8	8	16	12	10	7	281
	31	pressure vessel		41	37	39	24	35	26	23	20	17	22	23	17	19	13	16	14	10	11	18	14	12	8	459
		321	chemical facilities		3	2		1		3	2	2	4		1	4	3	2	1	1	4	1	3	2	2	41
	32	chemical facilities		4	3	2	5	1	7	3	2	2	4		1	4	3	2	1	1	4	1	3	2	2	57

		331	gas welding equipment		13	7		6		10	6	9	4	3	7	6	3	5	4	3	9	8	3	7	1	114
		332	arc welding equipment		7	8		5		9	6	8	3	7	6	6	4	6	3	7	3	3	3	2	9	105
		339	other welding equipment		7	8		8		6	5	2	4	4	4		4	1	2	3	1	1	2	2	4	68
	33		welding equipment	23	27	23	32	19	25	25	17	19	11	14	17	12	11	12	9	13	13	12	8	11	14	367
		341	kiln, caldron		6	6		7		5	4	3	8	5	9		1	5	4	12	3	7	5	6	5	101
		342	industrial dryer		2	1					1	1	1	2		1	1	2	2	5		1		1	1	22
		349	other kiln, caldron		2	1		3			1	3	1		1			1	1	2		2	1	1	1	21
	34		kiln, caldron	11	10	8	10	10	15	5	6	7	10	7	10	1	2	8	7	19	3	10	6	8	7	180
		351	transmission		6	6		5		2	5	3		2	2	2	2	6	3	6	2	1	4	1		58
		352	electric power facilities		1	2		1			2	3		3	4	3	4	1	2		1	1	2	2	3	35
		359	other electrical equipment		6	20		13		11	9	9	6	7	13	12	8	6	7	13	10	17	12	15	7	201
	35		electric equipment	17	13	28	17	19	16	13	16	15	6	12	19	17	14	13	12	19	13	19	18	18	10	344
		361	human power cranes		33	34		30		30	32	36	28	21	25	26	18	18	19	18	15	18	19	37	51	508
		362	human power hauling equipment		154	179		149		183	176	167	210	168	157	165	186	200	187	179	222	177	183	176	161	3,379
		363	human power machine		17	27		16		15	17	13	22	7	9	14	12	11	13	11	14	13	7	12	9	259
		364	hand tool		407	419		365		342	317	281	303	235	231	207	240	207	222	207	171	180	214	202	178	4,928
	36		human power machine, tools	687	611	659	605	560	608	570	542	497	563	431	422	412	456	436	441	415	422	388	423	427	399	10,974
		371	ladder		22	27		37		38	20	18	22	17	25	19	22	14	18	22	14	12	14	11	22	394
		372	slinging tool		424	435		389		424	364	378	339	289	286	283	283	281	248	263	260	246	212	221	190	5,815
		379	other tools		752	742		722		730	761	728	796	608	647	652	594	653	670	653	686	710	679	677	665	13,125
	37		tools	1,207	1,198	1,204	1,100	1,148	1,164	1,192	1,145	1,124	1,157	914	958	954	899	948	936	938	960	968	905	909	877	22,805
		391	other equipments, facilities		345	300		279		333	350	335	323	268	303	302	289	312	313	287	305	269	316	269	320	5,818
	39		other equipments, facilities	318	345	300	258	279	307	333	350	335	323	268	303	302	289	312	313	287	305	269	316	269	320	6,701
	3		other equipment	2,308	2,244	2,263	2,051	2,071	2,168	2,164	2,098	2,016	2,096	1,669	1,747	1,721	1,687	1,747	1,733	1,702	1,731	1,685	1,693	1,656	1,637	41,887
		411	scaffolding		42	56		37		37	41	28	34	36	32	28	44	33	26	19	31	26	29	34	29	642
		412	timbering		34	26		22		15	39	22	14	14	12	11	9	12	10	6	4	8	11	7	2	278
		413	stairs, landing stage		4	7		7		6	5	7	5	1	5	3	8	3	4	3	4	4	5	3	3	87
		414	opening		1	3		1		2	1	4	3	2	1	2		2				1	1		1	25

		415	roof, beam, haze, crossbeam, principal rafter		18	35		18		22	21	20	16	14	11	11	23	17	14	18	19	10	13	15	6	321
		416	working platform, boot board		16	8		10		11	12	12	11	7	10	11	11	10	6	13	7	7	9	7	8	186
		417	passage		13	23		18		13	13	13	12	12	11	9	8	6	9	12	13	7	12	7	12	223
		418	building, establishment		106	141		99		102	110	90	111	90	73	103	75	81	75	70	70	88	77	70	76	1,707
		419	other temporary buildings, establishments		100	100		117		104	96	72	94	86	79	99	80	91	84	109	107	98	86	90	116	1,808
	41		temporary buildings, establishments	362	334	399	339	329	371	312	338	268	300	262	234	277	258	255	228	250	255	249	243	233	253	6,349
	4		temporary buildings, establishments	362	334	399	339	329	371	312	338	268	300	262	234	277	258	255	228	250	255	249	243	233	253	6,349
		511	explosive substance		1	4		4		5	4	2	1	1	1		2	6	2	1	1	1			2	38
		512	inflammable substance		8	2		3		3	4		1	1	1	2	3		2	1	3		2			36
		513	inflammable gas			1							1					1		1						4
		514	harmful substance		11	19		15		10	9	15	10	4	14	13	8	11	8	5	8	3	7	7	7	184
		515	radiation																1							1
		519	other hazards, harmful substances		35	31		18		24	27	24	29	24	13	16	25	25	19	20	22	21	20	22	17	432
	51		hazards, harmful substances	67	55	57	46	40	42	42	44	41	42	30	29	31	38	43	31	29	34	25	29	29	26	850
		521	metal material		2,216	2,222		1,801		1,756	1,792	1,682	1,535	1,219	1,159	1,159	1,243	1,155	1,167	1,079	1,033	1,088	1,034	939	850	26,129
		522	lumber, bamboo		886	802		642		574	582	523	442	440	401	375	399	409	351	330	371	329	325	316	270	8,767
		523	stone, sand, substance		381	342		273		232	228	192	162	149	140	153	145	139	147	104	120	101	112	100	102	3,322
		529	other materials		647	515		481		444	505	484	434	350	366	363	389	352	360	295	307	298	281	251	259	7,381
	52		materials	4,311	4,130	3,881	3,538	3,197	3,249	3,006	3,107	2,881	2,573	2,158	2,066	2,050	2,176	2,055	2,025	1,808	1,831	1,816	1,752	1,606	1,481	56,697
	5		substance, material	4,378	4,185	3,938	3,584	3,237	3,291	3,048	3,151	2,922	2,615	2,188	2,095	2,081	2,214	2,098	2,056	1,837	1,865	1,841	1,781	1,635	1,507	57,547
		611	load		1,321	1,351		1,159		1,120	1,133	1,108	991	891	877	887	841	875	874	841	830	784	874	892	814	18,463
		612	machine/equipment as load		167	164		167		146	156	129	156	122	104	116	136	107	75	80	94	76	91	84	84	2,254
	61		load	1,504	1,488	1,515	1,339	1,326	1,293	1,266	1,289	1,237	1,147	1,013	981	1,003	977	982	949	921	924	860	965	976	898	24,853
	6		load	1,504	1,488	1,515	1,339	1,326	1,293	1,266	1,289	1,237	1,147	1,013	981	1,003	977	982	949	921	924	860	965	976	898	24,853
		711	natural ground, rock		154	131		115		84	79	50	76	61	66	62	72	60	62	50	54	48	45	36	35	1,340

	712	standing tree		348	340		317		296	280	285	259	366	311	302	261	238	272	232	234	242	212	189	211	5,195
	713	water		2	4		6		2	2	11	2	2	1	2	6	2	1	1	1	1	4	1	1	52
	714	abnormal environment					1		1	1							2								5
	715	high/cold temperature environment		6	6		4		2	8	1	5	2	2		3		3	1			1	1	3	48
	719	other environments		68	69		54		71	63	37	38	33	35	58	73	39	58	40	42	44	63	27	38	950
71		natural environment	586	578	550	469	497	511	456	433	384	380	464	415	424	415	341	396	324	331	335	325	254	288	9,156
7		environment	586	578	550	469	497	511	456	433	384	380	464	415	424	415	341	396	324	331	335	325	254	288	9,156
	911	other causal agent		270	185		192		122	130	121	119	90	84	140	104	116	93	100	82	108	99	68	66	2,289
91		other causal agent	260	270	185	144	192	167	122	130	121	119	90	84	140	104	116	93	100	82	108	99	68	66	2,860
	921	no causal agent		15	22		18		7	15	11	8	11	7	4	12	15	8	10	9	19	17	11	16	235
92		no causal agent	23	15	22	19	18	12	7	15	11	8	11	7	4	12	15	8	10	9	19	17	11	16	289
	999	unclassifiable		12	12		16		8	6	9	12	4	2	7	6	3	6	4	4	3	5	4	2	125
99		unclassifiable	23	12	12	17	16	10	8	6	9	12	4	2	7	6	3	6	4	4	3	5	4	2	175
9		others	306	297	219	180	226	189	137	151	141	139	105	93	151	122	134	107	114	95	130	121	83	84	3,324
0		total	11,916	11,557	11,241	10,046	9,828	9,874	9,448	9,367	8,769	8,552	7,150	6,998	7,189	7,192	7,035	6,843	6,467	6,600	6,376	6,410	6,049	5,912	180,819

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/2020enfctcs.html>