

Industrial accidents in civil engineering work in Japan in 1999-2020

civil engineering work industry Code No.0301

Type of accidents in civil engineering work in 1999-2020

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
fall from height	2,072	1,917	1,761	1,612	1,433	1,413	1,318	1,218	1,201	1,176	996	1,012	1,002	971	1,033	1,038	918	864	918	889	925	890
falling to same level	981	881	748	705	658	555	566	529	438	519	412	419	446	459	457	490	441	422	453	445	430	460
crash	450	429	382	342	278	257	278	268	222	207	192	203	190	191	222	182	194	158	192	181	184	196
struck by flying or falling object	1,504	1,403	1,191	1,091	949	842	833	745	687	665	619	571	568	568	509	511	459	467	450	406	386	400
collapse	526	476	437	391	336	318	305	284	252	273	207	192	182	194	185	192	190	159	158	163	138	153
crashed by	966	883	786	687	660	617	570	518	509	445	418	389	368	391	364	373	353	301	306	335	351	353
caught in/between	1,880	1,729	1,583	1,488	1,266	1,176	1,090	957	879	852	791	717	669	727	710	722	651	546	647	615	590	608
cut	578	575	513	446	424	430	384	356	352	318	310	334	296	308	296	294	275	266	326	278	260	305
injury to the sole of the foot	33	22	32	20	18	18	23	19	4	14	14	14	21	9	11	11	11	15	10	10	12	9
drown	9	5	8	9	8	8	6	9	4	14	10	5	31	12	4	15	4	5	7	8	3	5

contact to high/low-temperature	86	106	93	90	66	57	64	52	68	60	34	93	64	76	75	54	58	52	61	91	79	89
contact to harmful substance	37	44	42	32	13	26	24	28	22	26	14	21	14	14	19	16	11	23	21	18	14	23
electric shock	2	12	7	7	4	4	2	2	4	5	2	7	2	3	4	6	4	4	3	3	3	2
explosion	10	11	9	4	2	6	5	4	2	8	3	5	2	9	1	1	0	0	3	2	1	2
burst	13	8	11	8	2	4	6	3	5	3	4	3	4	3	1	2	1	5	4	4	3	1
fire	7	13	13	7	16	6	7	15	2	4	8	0	4	1	3	4	3	2	3	3	17	1
traffic accident (public road)	417	335	356	324	323	257	275	243	229	188	174	192	172	224	223	181	175	217	188	178	169	166
traffic accident (others)	12	6	3	14	1	3	10	2	4	1	3	2	4	5	2	6	1	3	2	2	3	3
reaction to motion/improper motion	380	381	355	295	279	234	241	241	221	202	197	212	196	191	222	202	173	216	223	231	207	234
others	40	46	39	26	27	45	43	62	32	33	31	19	64	33	21	27	29	34	36	24	25	60
unclassifiable	11	10	9	4	9	6	3	9	4	4	7	5	2	3	12	4	5	1	4	3	8	3
total	10,014	9,292	8,378	7,602	6,772	6,282	6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

machine	1,010	971	911	881	762	718	686	625	606	563	499	505	503	513	518	534	468	429	489	502	468	446
vehicle	333	266	262	254	259	200	212	201	175	160	166	164	133	165	168	143	138	164	130	140	135	138
pressure vessel	10	6	3	7	10	3	1	5	3	2	3	2	0	3	1	4	2	3	2	4	2	3
chemical facilities	0	0	1	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	13	10	6	3	7	8	10	4	10	3	8	4	4	2	0	3	3	2	2	5	3	5
kiln, caldron	1	2	2	-	2	-	1	2	0	1	3	0	1	0	1	0	0	0	1	0	1	1
electric equipment	9	8	19	6	10	8	5	6	6	9	5	7	4	8	2	8	4	9	6	3	6	3
human power machine, tools	366	337	314	247	253	238	203	192	148	180	178	141	149	145	128	144	119	95	122	113	122	130
tools	650	592	543	486	449	428	458	396	388	398	357	329	370	342	328	322	335	298	324	293	306	334
other equipments, facilities	77	92	79	63	43	56	63	46	66	42	36	44	40	44	34	53	44	45	49	40	27	45
temporary buildings, establishments	1,685	1,541	1,483	1,245	1,141	1,034	986	965	873	889	714	695	703	706	745	727	684	673	703	684	690	686
hazards, harmful	64	87	68	60	25	37	35	40	31	27	18	22	21	34	21	16	10	21	27	21	33	28

substances																						
materials	1,615	1,619	1,286	1,146	929	816	828	748	691	580	566	521	506	507	447	477	425	412	426	390	405	380
load	210	227	226	223	160	181	145	124	128	131	112	107	100	118	113	102	114	85	97	108	98	89
natural environment	1,096	920	885	776	696	709	649	628	528	541	468	531	545	560	564	509	456	415	437	498	414	473
other causal agent	69	56	49	37	43	40	35	34	22	20	24	18	34	16	21	18	19	25	36	26	15	54
no causal agent	133	125	107	100	89	76	84	78	58	72	81	73	63	64	85	69	66	79	84	95	88	91
unclassifiable	16	20	11	11	10	17	7	9	5	9	13	10	8	5	9	3	5	2	5	1	6	1
total	10,014	9,292	8,378	7,602	6,772	6,282	6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

Causal agents (small) of industrial accidents in civil engineering work in 1999-2020

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine			2		2		6	2	3	9	4	3	1	1	4	2	1	1	2	3	1	0
power transmission mechanism			16		10		9	5	6	10	4	6	4	3	7	2	6	3	2	5	1	3
circular sawing machine			137		114		98	83	90	69	57	67	53	57	63	53	33	43	37	41	37	39
band sawing machine			1		2		0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	1

wood planer machine			7	3		1	1	2	3	1	2	1	1	2	1	0	3	0	2	1	1
hollow chisel mortiser, wood borer			0	0		2	0	1	0	0	1	1	0	0	2	0	0	0	0	0	0
chamfering machine, router, woodworking milling machine			0	0		0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0
chain saw			71	83		59	60	58	49	75	69	69	62	63	80	60	70	80	65	79	98
other woodworking machines			28	26		28	20	16	26	19	23	24	15	23	14	13	13	21	17	11	10
leveling, transporting or loading machine			180	169		124	139	116	115	80	110	77	85	103	75	108	88	95	84	76	65
excavating machine			611	493		495	384	381	378	302	308	291	327	320	321	245	249	262	228	271	292
foundation work machine			47	39		34	38	27	28	23	18	16	26	26	23	28	19	26	24	13	21
hardening machine			128	92		74	73	61	68	61	74	50	53	43	58	50	49	37	34	43	34
demolition machine			50	42		40	38	34	34	40	42	22	36	36	31	33	30	26	16	21	24
vehicle for high lift			8	11		5	7	8	17	9	4	6	4	7	5	6	6	6	9	8	9

machine																						
food manufacturing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
printing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial robot			0		1		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
other general power machines			195		198		145	164	154	117	135	134	114	127	109	119	126	114	141	111	125	134
felling machine																7	4	5	6	3	6	
mobile logging machine																1	0	4	0	1	1	
skyline yarding machine																0	0	0	0	0	1	
other mobile silviculture machine																0	0	0	0	1	0	
crane			41		53		36	27	38	25	27	23	23	23	31	23	22	11	17	16	22	34
mobile crane			267		242		225	191	168	205	177	162	153	135	165	167	154	138	146	154	140	143
derrick crane			0		0		0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
elevator, lift			0		0		0	1	1	1	1	0	1	0	0	0	0	1	0	1	1	0
cargo lifting appliance			1		2		1	0	1	0	0	0	0	0	1	1	0	0	3	0	2	0
gondola			0		1		0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0

lumberyard equipment, logging cableway			0	1		2	3	1	2	2	3	1	2	0	0	0	0	0	0	0	0	0
simple skyline yarding equipment																1	0	0	1	0	0	
other powered crane			19	13		16	10	12	12	4	4	8	4	8	5	8	4	7	5	8	1	
truck			800	666		595	552	547	496	429	467	453	463	457	474	420	392	446	443	420	399	
forklift			10	9		14	11	9	11	8	6	11	4	9	8	9	3	8	7	10	8	
railway equipment			9	2		5	6	6	6	6	3	2	4	6	3	10	1	2	5	4	4	
conveyor			13	20		14	10	8	12	7	5	7	10	7	7	4	9	8	14	7	9	
loader			13	7		9	10	4	7	5	0	2	3	4	6	2	3	1	3	5	5	
straddle carrier			0	0		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
rough terrain hauler			24	24		16	16	13	17	27	8	13	8	12	14	12	5	13	10	12	9	
other powered conveying machines			42	34		32	20	19	14	17	16	15	21	23	22	11	16	11	19	10	11	
cars, bus, motorcycle			240	237		189	187	157	143	144	150	119	155	153	133	125	145	117	128	118	125	
railway vehicle			3	1		4	1	1	2	5	1	0	1	2	1	3	3	4	1	3	3	
other vehicles			19	21		19	13	17	15	17	13	14	9	13	9	10	16	9	11	14	10	
boiler			0	0		0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	

natural ground, rock			517		439		366	344	296	279	232	244	216	257	263	217	199	194	174	185	174	181
standing tree			172		147		162	136	138	153	171	143	151	144	132	140	134	120	124	145	113	131
water			14		13		7	10	3	10	7	4	59	9	4	15	3	4	8	11	6	11
abnormal environment			10		4		5	4	5	9	2	5	5	5	5	3	2	6	4	0	3	1
high/cold temperature environment			54		26		31	40	37	38	9	70	38	54	69	42	37	37	44	78	57	76
other environments			118		67		78	94	49	52	47	65	76	91	91	92	81	54	83	79	61	73
other causal agent			49		43		35	34	22	20	24	18	34	16	21	18	19	25	36	26	15	54
no causal agent			107		89		84	78	58	72	81	73	63	64	85	69	66	79	84	95	88	91
unclassifiable			11		10		7	9	5	9	13	10	8	5	9	3	5	2	5	1	6	1
total			8,378		6,772		6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

Workers age of industrial accidents in civil engineering work in 1999-2020

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
19 years old or less	278	236	201	182	146	103	87	74	74	65	71	89	81	84	110	106	79	83	100	67	67	72
20-29	1,577	1,506	1,435	1,341	1,077	914	872	766	616	586	487	489	435	494	457	423	389	381	437	404	382	451

30-39	1,198	1,218	1,110	1,052	1,048	1,017	1,002	963	903	893	788	836	848	783	742	698	622	569	553	517	491	495
40-49	1,690	1,544	1,420	1,311	1,152	1,050	930	893	820	818	775	799	749	849	852	849	835	788	842	830	769	780
50-59	2,713	2,527	2,361	2,081	1,939	1,850	1,840	1,650	1,515	1,475	1,230	1,085	1,052	989	992	952	838	762	822	817	825	840
60 years old or more	2,558	2,261	1,851	1,635	1,410	1,348	1,322	1,218	1,213	1,180	1,095	1,117	1,136	1,193	1,221	1,303	1,193	1,177	1,261	1,254	1,274	1,325
total	10,014	9,292	8,378	7,602	6,772	6,282	6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

Workers' number of workplace of industrial accidents in civil engineering work in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	4,571	4,362	3,858	3,669	3,409	3,201	3,102	2,842	2,715	2,670	2,287	2,264	2,200	2,225	2,215	2,210	1,994	1,856	1,960	1,942	1,844	1,861
10-29	3,904	3,529	3,220	2,807	2,444	2,216	2,208	2,029	1,792	1,739	1,593	1,606	1,507	1,538	1,551	1,503	1,366	1,302	1,430	1,358	1,376	1,459
30-49	976	867	800	690	544	536	442	445	392	407	375	333	369	386	365	379	384	358	406	380	371	404
50-99	397	387	345	299	262	236	215	191	174	149	147	146	170	173	164	171	165	167	172	156	157	163
100-299	158	131	145	125	102	87	77	50	60	42	40	60	46	66	78	65	43	73	41	47	53	68
300 workers or more	8	16	10	12	11	6	9	7	8	10	4	6	9	4	1	3	4	4	6	6	7	8
total	10,014	9,292	8,378	7,602	6,772	6,282	6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

Month of industrial accidents in civil engineering work in 1999-2020

Aomori	159	137	139		96		86	64	58	66	61	64	83	85	70	66	58	72	81	61	73	70
Iwate	156	166	153		113		89	86	76	60	67	63	96	73	83	100	90	82	102	99	100	83
Miyagi	156	156	129		130		76	94	95	101	77	75	134	141	129	123	109	149	123	123	111	94
Akita	151	107	147		98		95	87	63	74	80	59	58	73	85	68	76	50	60	65	68	78
Yamagata	154	145	131		109		87	77	80	58	54	81	74	65	60	76	71	64	75	69	54	68
Fukushima	208	193	146		129		106	95	118	124	98	99	105	137	119	157	114	95	94	97	85	99
Ibaraki	196	141	135		119		101	75	77	85	74	74	99	109	101	78	82	80	96	73	68	70
Tochigi	142	135	106		66		64	61	62	69	63	53	52	56	46	40	56	44	42	37	55	48
Gunma	230	212	187		140		87	82	79	97	90	85	67	56	69	59	61	64	61	65	67	69
Saitama	272	250	211		209		203	163	164	200	172	167	134	146	137	168	147	109	135	135	123	129
Chiba	251	202	212		218		204	197	160	187	172	172	150	155	182	161	127	138	127	148	130	146
Tokyo	424	373	330		343		335	321	277	307	242	238	230	254	225	230	214	180	229	173	171	179
Kanagawa	384	395	357		317		289	301	277	244	194	222	241	175	170	177	167	190	183	178	183	193
Niigata	358	316	279		204		272	235	181	168	153	145	138	156	142	134	110	121	83	119	91	98
Toyama	145	140	120		87		87	68	70	56	74	67	67	85	51	64	53	43	49	45	55	66
Ishikawa	74	74	57		64		39	41	31	41	48	43	41	34	27	38	29	28	30	29	46	37
Fukui	121	110	105		82		65	57	52	67	43	41	55	53	41	40	51	32	42	40	62	54
Yamanashi	100	102	97		83		49	60	47	60	40	41	40	36	42	51	46	37	44	36	32	30
Nagano	251	217	204		161		121	99	109	106	107	90	83	82	82	110	90	82	83	81	95	89
Gifu	264	249	215		189		112	110	89	102	84	83	62	83	79	75	83	63	76	73	71	86

Shizuoka	298	307	255		206		188	165	191	164	145	152	133	125	117	131	123	107	102	103	115	124
Aichi	324	345	304		257		200	178	205	200	187	185	149	152	155	169	145	130	152	149	128	142
Mie	259	207	214		155		112	103	109	95	82	99	85	84	91	85	80	79	76	81	79	65
Shiga	86	89	66		69		41	52	40	61	41	27	27	31	25	31	30	23	21	25	29	28
Kyoto	160	153	142		88		108	109	91	68	79	54	67	85	60	68	69	47	67	50	48	62
Osaka	263	249	254		218		185	168	190	196	156	124	117	114	109	130	114	86	85	107	79	97
Hyogo	372	360	307		227		215	203	176	155	125	140	140	147	144	137	97	106	114	102	99	82
Nara	136	91	112		94		67	70	54	59	68	55	47	56	44	51	31	33	35	28	41	39
Wakayama	184	139	131		102		90	105	82	65	72	62	73	77	80	59	63	56	41	37	45	50
Tottori	71	49	56		53		35	39	29	29	27	24	30	29	28	34	28	30	32	19	24	32
Shimane	101	106	124		87		65	57	59	62	41	42	49	43	46	35	36	33	31	37	43	29
Okayama	217	210	176		127		137	89	93	83	74	74	66	80	92	71	58	59	75	64	60	50
Hiroshima	286	278	242		185		167	141	134	111	110	93	96	87	96	69	69	65	87	98	87	114
Yamaguchi	140	137	142		101		91	83	89	85	67	68	78	66	59	52	55	65	71	44	56	53
Tokushima	156	133	130		81		104	99	82	77	59	57	59	41	41	57	49	52	57	36	50	63
Kagawa	85	70	48		57		82	54	40	47	40	43	35	42	37	25	25	34	36	37	36	42
Ehime	237	234	226		149		144	103	95	83	67	63	62	68	63	64	50	65	65	82	56	54
Kochi	228	193	170		114		110	93	94	73	51	59	82	72	82	73	79	69	73	62	71	81
Fukuoka	376	371	323		264		251	229	225	212	179	176	168	173	183	181	168	153	172	180	130	149
Saga	79	97	66		56		52	44	42	46	47	55	45	41	63	59	53	36	59	44	50	59

Nagasaki	185	177	150		107		93	86	72	66	67	80	54	62	54	73	63	53	53	63	60	61
Kumamoto	211	168	144		125		100	92	95	75	92	99	65	73	96	87	65	79	99	80	89	90
Oita	232	179	171		129		118	91	102	97	70	77	66	73	98	81	72	86	84	90	84	64
Miyazaki	153	160	147		83		90	116	95	104	64	82	73	76	71	55	45	62	55	53	75	84
Kagoshima	213	240	175		176		167	163	136	114	107	119	110	118	116	92	103	129	118	104	116	112
Okinawa	45	38	30		30		33	24	31	31	21	33	42	32	22	29	36	31	38	30	39	31
total	10,014	9,292	8,378		6,772		6,053	5,564	5,141	5,017	4,446	4,415	4,301	4,392	4,374	4,331	3,956	3,760	4,015	3,889	3,808	3,963

Industrial accidents mean fatal and non-fatal injuries with work absence of 4 days and more. 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)

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Fatal accidents in civil engineering work in Japan in 1999-2020

civil engineering work industry Code No.0301

Type of fatal accidents in civil engineering work in 1999-2020

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
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fall from height	105	83	59	55	69	65	56	44	45	34	31	39	33	39	35	23	19	26	34	30	25	25
falling to same level	15	16	12	8	10	7	9	5	5	3	5	8	4	6	6	7	6	2	2	3	2	4
crash	3	1	2	1	2	4	1	0	1	0	3	1	0	2	2	1	0	0	0	1	1	0
struck by flying or falling object	32	28	16	20	11	11	10	13	16	13	10	8	8	5	8	8	8	7	7	10	5	6
collapse	65	42	45	46	40	31	23	25	20	23	22	17	13	21	22	17	12	13	15	11	18	14
crashed by	38	50	34	23	16	27	27	25	16	18	18	12	13	19	15	19	17	13	14	13	14	9
caught in/between	66	52	52	47	39	31	32	25	25	28	26	21	15	22	10	21	24	10	20	18	6	17
cut	2	3	0	1	0	0	2	1	1	1	0	1	1	2	1	1	0	0	0	3	1	1
injury to the sole of the foot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	5	6	5	7	7	9	4	6	3	14	7	4	31	11	4	14	3	4	5	7	3	3
contact to high/low-temperature	5	8	8	8	3	2	2	4	1	5	0	6	1	5	3	1	3	2	3	1	2	2
contact to harmful substance	1	7	3	2	0	2	1	5	1	8	1	5	2	0	4	3	2	0	1	0	0	2
electric shock	1	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0
explosion	1	0	0	0	0	0	1	0	0	2	0	1	0	2	1	0	0	0	0	0	0	0
burst	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
fire	1	3	2	0	0	0	0	1	0	0	1	0	0	0	1	3	0	0	0	0	0	0
traffic accident (public road)	60	48	58	35	34	35	28	31	23	16	22	16	14	14	15	19	9	18	19	11	10	15
traffic accident (others)	0	0	1	6	1	1	4	2	1	0	3	0	1	2	0	0	0	0	1	0	1	1

vehicle	35	24	30	29	19	19	20	23	7	8	13	10	12	11	9	11	9	8	6	9	5	9
pressure vessel	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
human power machine, tools	1	0	1	0	1	1	0	2	0	0	1	0	1	1	0	0	0	0	1	0	0	0
tools	12	14	12	6	10	6	13	11	6	10	4	6	5	4	4	4	6	2	4	3	2	2
other equipments, facilities	2	0	0	0	0	1	2	1	1	0	2	0	0	2	0	0	0	1	0	0	0	0
temporary buildings, establishments	68	41	39	38	37	34	20	26	23	20	16	24	20	28	16	18	16	11	21	18	15	13
hazards, harmful substances	2	7	0	2	0	0	2	0	1	3	1	3	2	3	4	3	1	0	1	0	0	2
materials	12	8	5	6	3	3	5	3	4	3	3	0	2	3	1	2	0	0	3	3	0	3
load	4	3	3	1	2	1	3	1	0	3	1	2	0	2	2	1	1	1	0	0	0	2
natural environment	75	75	59	62	54	55	40	48	39	47	31	29	78	31	44	32	27	23	27	25	29	23
other causal agent	0	1	2	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	1
no causal agent	0	0	0	0	0	1	0	2	0	1	0	0	4	3	3	1	3	4	2	2	2	0
unclassifiable	2	2	0	2	0	1	0	1	0	0	0	0	1	1	2	0	1	1	0	0	0	0
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

Causal agents (small) of fatal accidents in civil engineering work in 1999-2020

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine	0	0	0	0	0	0	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
circular sawing machine	1	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0
band sawing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
wood planer machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hollow chisel mortiser, wood borer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chamfering machine, router, woodworking milling machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chain saw	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
other woodworking machines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
leveling, transporting or loading machine	16	14	10	9	4	12	12	8	12	4	9	7	4	4	2	5	3	6	4	9	1	5
excavating machine	61	57	45	28	41	20	24	28	16	21	14	17	16	19	19	18	9	8	17	9	6	13
foundation work machine	3	0	4	3	2	0	3	0	0	2	1	0	1	0	0	1	0	0	2	3	0	2

other kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transmission	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
electric power facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other electrical equipment	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power cranes	0	0	0	0	0	0	0	2	0	0	1	0	1	1	0	0	0	0	1	0	0	0
human power hauling equipment	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ladder	4	4	1	1	3	2	3	1	0	2	0	4	1	3	1	1	1	1	2	1	0	1
slinging tool	7	7	7	4	2	4	3	7	5	6	3	2	3	1	2	2	4	1	2	2	2	1
other tools	1	3	4	1	5	0	7	3	1	2	1	0	1	0	1	1	1	0	0	0	0	0
other equipment, facilities	2	0	0	0	0	1	2	1	1	0	2	0	0	2	0	0	0	1	0	0	0	0
scaffolding	14	9	3	6	10	6	4	4	3	0	2	11	3	6	3	2	2	3	5	5	3	2
timbering	4	2	5	2	0	3	0	1	1	1	1	2	3	7	1	0	2	0	1	0	0	0
stairs, landing stage	3	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
opening	3	2	0	4	1	4	2	1	3	0	2	0	0	2	2	0	0	0	2	5	0	1
roof, beam, haze, crossbeam, principal rafter	1	0	1	1	0	2	0	3	0	2	0	0	1	1	0	0	1	0	1	3	1	0
working platform, boot	4	1	1	1	5	1	0	1	0	3	1	2	3	0	3	0	0	0	0	0	1	0

water	3	5	3	4	5	7	2	5	2	10	3	1	55	5	3	4	0	1	3	5	3	3
abnormal environment	1	3	2	0	1	2	0	2	0	4	0	2	0	0	1	0	1	0	0	0	0	0
high/cold temperature environment	5	7	7	9	3	2	4	4	2	5	0	6	1	4	3	1	3	2	3	0	2	2
other environments	4	4	0	0	4	4	5	12	0	1	1	1	1	1	2	2	0	0	1	2	0	3
other causal agent	0	1	2	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	1
no causal agent	0	0	0	0	0	1	0	2	0	1	0	0	4	3	3	1	3	4	2	2	2	0
unclassifiable	2	2	0	2	0	1	0	1	0	0	0	0	1	1	2	0	1	1	0	0	0	0
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

Workers age of fatal accidents in civil engineering work in 1999-2020

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
19 years old or less	4	8	6	2	4	3	2	2	1	3	1	3	2	3	5	4	1	1	3	0	1	0
20-29	41	34	32	34	27	19	19	18	19	8	9	14	5	10	9	4	7	6	14	7	11	6
30-39	39	25	38	27	24	26	21	31	24	25	17	22	20	23	14	20	10	18	9	16	10	10
40-49	76	67	46	39	36	36	30	24	17	28	18	21	34	23	18	30	19	13	22	13	10	23
50-59	115	88	95	78	87	81	69	69	50	50	47	39	54	44	30	32	25	23	25	27	15	17
60 years old or more	130	128	82	82	56	65	66	56	49	54	58	41	52	50	55	48	45	39	50	48	43	46
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

Workers' number of workplace of fatal accidents in civil engineering work in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	135	136	117	106	94	95	87	102	72	67	61	67	62	66	53	50	49	35	57	46	42	54
10-29	178	130	117	90	96	93	75	71	64	76	57	53	61	56	48	55	36	44	47	40	35	35
30-49	57	47	38	41	29	26	32	16	14	16	24	10	29	17	15	20	12	14	11	13	9	10
50-99	26	27	13	12	12	11	6	8	7	5	7	8	9	8	7	9	8	6	8	9	2	2
100-299	8	8	13	13	3	4	6	3	3	4	1	2	6	6	8	3	2	1	0	3	2	1
300 workers or more	1	2	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

Month of fatal accidents in civil engineering work in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	33	39	21	28	16	22	16	17	11	16	12	14	14	8	14	11	11	6	15	9	7	11
February	39	37	16	25	31	24	15	18	26	13	22	17	11	27	4	16	9	9	11	11	11	11
March	40	33	37	30	23	19	20	16	9	13	10	10	62	11	6	15	8	10	7	13	9	9
April	38	21	27	17	16	6	19	15	9	5	4	4	7	11	9	8	6	10	4	4	3	11
May	26	19	19	14	18	8	15	8	10	10	8	7	7	9	11	6	8	6	11	6	6	8
June	26	27	23	10	15	16	14	13	16	8	11	7	7	16	7	8	7	3	8	12	7	6

July	25	30	25	25	29	22	13	22	14	20	13	15	4	15	13	17	10	9	15	12	8	4
August	37	31	32	25	21	17	15	15	7	21	13	12	8	7	15	14	11	6	7	6	5	8
September	39	25	19	15	14	26	10	21	17	14	12	11	9	7	11	4	11	15	10	10	3	8
October	26	27	24	25	16	32	19	17	17	16	17	16	14	14	11	16	13	9	13	14	13	8
November	30	35	17	20	19	22	28	22	9	17	13	13	12	13	17	9	10	6	12	10	8	7
December	46	26	39	28	16	16	23	16	15	15	15	14	12	15	13	14	3	11	10	4	10	11
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

Prefecture of fatal accidents in civil engineering work in 1999-2020

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hokkaido	37	29	22	22	15	23	19	15	7	11	16	8	5	16	14	13	8	11	13	9	9	6
Aomori	3	6	6	6	4	2	4	4	3	2	1	0	3	3	0	3	1	0	1	2	1	2
Iwate	4	5	5	6	8	2	5	0	2	5	5	1	29	3	1	5	5	3	3	6	5	2
Miyagi	12	7	5	3	4	1	1	2	3	5	4	3	25	4	4	4	1	4	2	2	3	1
Akita	4	4	2	2	3	3	5	7	3	1	2	3	2	1	9	1	5	2	2	1	0	1
Yamagata	7	5	4	1	0	2	2	2	0	1	2	1	0	4	1	4	0	2	1	1	1	1
Fukushima	10	5	8	8	6	3	6	4	2	3	6	2	7	5	7	6	5	3	4	0	2	5
Ibaraki	7	4	8	11	6	4	5	1	3	4	3	3	2	7	4	1	5	6	4	5	2	2
Tochigi	7	10	6	5	3	7	3	3	2	0	2	2	1	1	0	0	1	0	0	0	1	2

Gunma	9	2	8	2	5	4	5	3	3	1	3	2	0	1	1	3	1	0	3	0	0	2
Saitama	8	9	7	8	7	10	6	4	4	4	2	4	3	1	2	3	4	1	5	3	3	2
Chiba	6	8	9	9	8	13	9	11	8	3	6	5	2	3	2	5	5	3	4	3	1	4
Tokyo	20	15	6	9	4	6	11	10	6	10	3	9	8	6	3	13	5	6	5	2	3	5
Kanagawa	13	14	8	5	10	14	8	7	4	4	7	3	5	4	2	2	3	2	3	4	2	6
Niigata	11	7	7	7	8	7	14	4	4	8	6	6	4	6	5	2	1	1	1	4	3	3
Toyama	4	1	9	2	3	2	4	3	4	1	1	5	7	2	2	1	2	0	3	4	2	1
Ishikawa	4	3	0	2	3	4	4	1	2	3	3	1	1	2	0	1	0	2	4	1	3	1
Fukui	5	3	4	4	2	4	2	2	4	3	2	2	1	1	0	3	0	0	0	2	0	2
Yamanashi	5	7	7	7	4	5	1	4	4	7	3	1	3	0	3	5	2	3	2	1	1	3
Nagano	9	12	13	5	5	0	5	2	1	4	3	6	4	4	4	5	1	2	3	2	3	1
Gifu	8	12	3	7	12	3	4	5	1	3	0	8	1	1	0	1	4	2	4	2	0	2
Shizuoka	7	10	8	12	10	6	4	8	8	7	7	3	4	5	4	5	7	5	0	5	0	4
Aichi	13	9	13	13	11	14	6	10	5	8	5	5	4	2	8	6	3	2	6	4	4	4
Mie	13	12	10	6	5	1	1	2	4	8	1	3	2	4	2	2	3	2	1	3	3	2
Shiga	3	6	3	2	2	1	2	1	3	2	2	0	0	2	1	1	0	0	0	1	1	1
Kyoto	6	8	5	5	2	0	1	4	0	2	1	2	0	3	2	1	2	1	4	1	1	1
Osaka	7	9	7	5	6	4	8	9	7	8	3	3	2	1	2	2	1	1	6	3	1	5
Hyogo	11	14	7	12	5	7	3	9	5	0	6	2	7	7	3	4	3	4	2	4	4	4
Nara	6	2	4	1	3	4	1	1	4	1	1	2	2	3	2	4	2	2	1	2	1	1

Wakayama	6	3	4	3	2	3	0	5	3	2	3	0	1	3	3	0	0	3	2	0	2	3
Tottori	11	3	3	2	0	2	1	4	1	1	3	0	0	2	2	1	0	0	2	0	0	2
Shimane	8	2	6	2	7	0	0	2	2	1	3	1	2	2	3	1	0	1	0	1	1	1
Okayama	7	9	5	6	2	5	6	2	3	2	3	2	1	7	7	2	1	1	2	1	1	0
Hiroshima	10	12	11	3	3	8	5	0	4	4	3	5	6	3	4	3	0	0	3	5	2	0
Yamaguchi	8	8	5	1	3	5	3	7	4	0	1	2	2	2	2	3	2	2	3	1	2	1
Tokushima	9	4	5	3	2	3	5	2	3	2	1	2	2	0	0	3	0	0	3	4	2	1
Kagawa	5	1	2	5	2	3	2	2	3	2	1	1	0	3	0	0	0	0	1	2	0	1
Ehime	5	10	5	7	6	4	3	3	2	2	3	3	2	1	1	1	3	2	3	5	2	1
Kochi	9	8	7	7	2	7	6	2	2	1	1	2	2	6	4	2	2	4	1	1	3	0
Fukuoka	16	8	10	10	12	5	5	10	6	12	6	4	3	8	4	3	6	0	3	3	1	3
Saga	3	4	3	2	1	4	3	3	0	3	0	4	0	0	2	0	1	4	2	1	0	3
Nagasaki	7	6	5	2	5	3	4	4	2	4	5	1	3	2	1	0	1	3	0	1	2	1
Kumamoto	8	7	6	1	10	6	1	4	3	3	3	8	1	3	3	4	0	2	1	3	3	2
Oita	10	9	5	5	4	2	4	0	3	4	2	1	1	5	1	2	3	2	6	2	2	1
Miyazaki	4	6	7	5	5	3	0	3	4	1	0	2	2	1	3	2	4	3	1	0	3	2
Kagoshima	15	10	5	8	3	8	9	3	8	4	4	6	2	3	3	3	3	2	2	2	1	2
Okinawa	5	2	1	3	1	3	1	6	1	1	2	1	3	0	0	2	1	1	1	2	3	2
total	405	350	299	262	234	230	207	200	160	168	150	140	167	153	131	138	107	100	123	111	90	102

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