

## Industrial accidents in metal products in Japan in 1999-2020

metal products industry Code No.0112

### Type of accidents in metal products 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	685	768	748	666	615	593	586	603	556	527	501	424	427	437	373	413	379	361	400	427	392	374
falling to same level	630	587	638	588	601	544	559	552	549	509	444	408	428	434	422	416	412	448	397	477	420	417
crash	335	368	303	279	253	240	254	250	290	251	189	177	186	152	168	180	190	137	177	179	178	154
struck by flying or falling object	1,303	1,285	1,170	1,011	1,035	997	969	962	933	910	701	627	661	667	628	635	643	654	627	627	524	459
collapse	347	377	343	324	305	301	296	312	309	280	223	219	209	198	176	206	208	192	177	172	180	169
crashed by	462	408	436	409	366	365	362	337	370	358	240	277	240	226	210	240	246	212	252	261	242	204
caught in/between	3,201	3,192	2,946	2,632	2,686	2,609	2,375	2,377	2,311	2,073	1,596	1,616	1,629	1,636	1,504	1,649	1,490	1,436	1,452	1,464	1,410	1,237
cut	706	695	640	529	534	563	463	482	529	466	339	354	334	322	386	333	319	310	302	325	330	285
injury to the sole of the foot	10	10	13	19	8	9	15	13	8	16	6	10	9	6	10	10	12	11	10	6	8	9
drown	0	1	0	1	0	-	0	0	0	0	0	0	14	0	0	0	0	1	1	0	0	0

contact to high/low-temperature	108	140	105	93	82	100	71	86	88	93	72	86	93	90	98	88	72	88	85	94	103	104
contact to harmful substance	33	32	44	42	56	46	28	46	48	30	26	35	30	24	36	27	37	26	25	40	41	37
electric shock	9	7	8	4	7	6	8	2	4	7	9	7	7	6	8	5	5	6	4	8	3	1
explosion	10	10	6	7	16	1	11	8	11	8	7	5	4	4	6	11	2	3	0	4	3	3
burst	9	2	9	2	4	4	2	8	7	6	1	4	2	2	0	3	7	3	3	3	1	4
fire	9	4	6	9	9	13	6	12	9	13	13	8	2	8	18	7	7	5	5	7	2	3
traffic accident (public road)	69	53	53	40	42	42	37	51	40	36	28	38	33	39	28	31	19	34	36	34	27	26
traffic accident (others)	5	0	1	-	0	1	2	3	5	0	0	0	0	1	1	1	0	0	1	0	0	0
reaction to motion/improper motion	413	422	417	388	390	365	392	411	407	400	275	291	293	251	285	301	276	264	289	280	307	250
others	30	25	22	11	19	21	15	21	19	18	12	5	14	16	14	13	12	14	8	22	15	17
unclassifiable	4	8	4	3	3	4	3	6	8	4	2	1	2	4	5	3	4	6	8	2	0	2
total	8,378	8,394	7,912	7,057	7,031	6,824	6,454	6,542	6,501	6,005	4,684	4,592	4,617	4,523	4,376	4,572	4,340	4,211	4,259	4,432	4,186	3,755

Causal agents (middle) of industrial accidents in metal products in 1999-2020

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
engine	4	5	4	1	2	2	2	0	1	4	0	1	1	1	0	0	1	0	0	2	1	1
power transmission mechanism	39	35	23	33	32	30	32	37	36	33	25	35	18	30	24	22	25	20	16	17	13	18
woodworking machine	54	46	43	34	35	48	38	33	37	28	23	28	25	18	25	24	21	21	21	17	29	19
construction machine	11	13	14	17	11	10	17	9	12	11	6	10	4	8	9	10	5	5	16	6	8	11
metal manufacturing machine	2,438	2,515	2,208	1,897	1,984	1,962	1,757	1,788	1,749	1,534	1,109	1,171	1,213	1,229	1,163	1,185	1,108	1,038	1,000	1,028	1,012	884
general machine	283	274	325	297	304	293	242	236	258	218	192	222	183	154	175	171	184	157	172	190	191	127
mobile silviculture machine																	0	0	0	0	0	0
crane	491	511	513	474	474	419	464	429	431	427	336	326	329	304	293	316	292	304	325	323	317	282
conveying	441	452	397	391	369	378	357	358	356	308	267	259	246	270	242	295	242	226	276	240	241	231





machine			0	2		1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	1
hollow chisel mortiser, wood borer			6	2		1	2	4	4	0	2	2	0	1	2	5	3	0	1	2	4
chamfering machine, router, woodworking milling machine			2	2		2	0	1	1	1	0	1	1	0	0	0	0	0	0	4	0
chain saw			1	0		1	1	0	0	0	1	0	0	1	0	0	0	2	0	0	2
other woodworking machines			8	5		6	8	1	1	4	3	5	3	6	5	3	2	3	4	5	3
leveling, transporting or loading machine			4	1		3	1	1	2	1	4	2	1	2	0	0	0	2	1	0	2
excavating machine			6	4		7	4	6	5	2	4	0	2	6	2	2	3	4	3	3	2
foundation work machine			0	1		1	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0
hardening machine			1	0		0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0
demolition machine			0	0		2	1	1	0	1	1	0	1	0	2	1	1	3	1	0	1
vehicle for high lift work			2	2		2	0	1	4	0	0	0	1	0	0	0	0	3	0	3	4

other construction machines			1	3		2	3	3	0	2	1	1	3	1	5	0	1	2	1	1	2
lathe			164	134		110	153	130	128	101	88	92	108	105	73	104	79	62	74	79	83
drill press, milling machine			319	249		244	241	222	200	140	137	128	146	131	143	141	130	95	109	102	100
grinding machine, buffing machine			239	210		173	202	234	187	147	173	168	132	161	153	153	148	133	137	142	129
power press			682	705		624	583	541	470	326	358	383	391	363	387	339	310	324	299	302	248
forging pressure hammer			11	4		6	9	0	7	1	2	2	0	4	3	4	4	7	7	2	5
shearing machine			84	90		74	60	88	88	64	54	52	71	43	57	39	46	33	41	38	30
other metal manufacturing machines			709	592		526	540	534	454	330	359	388	381	356	369	328	321	346	361	347	289
centrifugal machine			1	1		1	0	1	7	2	2	3	0	1	2	2	0	1	2	3	3
mixer, grinder			3	3		3	4	1	6	7	4	5	5	6	5	5	3	0	8	5	3
roll machine (except printingroll machine)			71	66		56	50	48	43	52	43	38	27	46	35	43	38	34	33	26	25
injection molding machine			5	8		2	6	6	4	4	9	2	4	2	4	3	1	4	5	2	2









hauling equipment			80		75		79	95	94	73	54	71	59	61	55	63	54	61	72	68	66	60
human power machine			22		16		7	13	6	14	6	9	3	6	3	6	9	6	8	7	4	3
hand tool			136		129		107	101	109	100	87	74	67	67	68	72	64	73	60	85	63	63
ladder			248		216		199	181	207	176	196	144	151	148	131	123	126	115	133	135	147	122
slinging tool			207		189		194	173	203	173	136	136	137	116	125	119	136	126	114	108	118	73
other tools			164		134		162	171	170	177	111	109	122	95	101	109	133	116	122	108	115	107
other equipment, facilities			108		99		103	110	97	100	84	81	72	78	77	92	77	107	65	83	94	67
scaffolding			26		26		15	25	33	18	14	16	23	22	14	15	13	12	10	12	19	14
timbering			1		0		0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0
stairs, landing stage			109		97		79	99	82	88	69	61	65	62	77	65	57	50	78	74	74	59
opening			5		12		12	8	11	10	10	4	11	12	6	4	5	10	7	7	9	10
roof, beam, haze, crossbeam, principal rafter			24		20		15	15	10	20	8	14	14	9	9	10	10	15	11	16	8	10
working platform, boot board			124		125		107	107	114	134	101	98	91	72	80	75	96	91	67	73	71	67
passage			232		198		227	226	185	197	165	135	171	175	154	180	171	163	163	209	172	190
building,			104		78		86	85	78	76	56	56	67	59	48	56	42	42	61	51	42	40





30-39	1,305	1,350	1,292	1,313	1,296	1,360	1,288	1,382	1,353	1,294	974	1,034	957	945	895	922	893	808	795	828	754	664
40-49	1,584	1,515	1,312	1,101	1,146	1,071	1,017	1,032	1,036	991	848	864	929	950	954	1,006	921	978	946	1,007	955	866
50-59	2,523	2,573	2,383	2,053	1,946	1,889	1,724	1,658	1,610	1,368	1,016	886	859	805	731	764	707	760	803	845	821	749
60 years old or more	1,082	1,059	1,085	995	1,057	1,020	1,028	1,092	1,166	1,136	905	839	931	881	860	891	891	814	839	893	821	759
total	8,378	8,394	7,912	7,057	7,031	6,824	6,454	6,542	6,501	6,005	4,684	4,592	4,617	4,523	4,376	4,572	4,340	4,211	4,259	4,432	4,186	3,755

#### Workers' number of workplace of industrial accidents in metal products 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	3,309	3,369	3,142	2,808	2,771	2,708	2,485	2,395	2,252	2,045	1,634	1,528	1,597	1,395	1,398	1,363	1,302	1,225	1,184	1,247	1,075	1,003
10-29	2,959	2,825	2,718	2,432	2,380	2,354	2,243	2,276	2,252	2,082	1,622	1,606	1,588	1,663	1,553	1,626	1,567	1,464	1,486	1,487	1,394	1,303
30-49	1,019	1,062	972	884	917	870	866	898	904	860	660	661	632	654	665	744	710	721	725	746	739	669
50-99	690	702	671	590	577	567	526	577	640	597	448	483	461	465	441	494	458	457	519	499	567	438
100-299	324	361	324	287	314	280	280	324	376	356	281	253	291	285	262	302	269	302	307	395	338	295
300 workers or more	77	75	85	56	72	45	54	72	77	65	39	61	48	61	57	43	34	42	38	58	73	47
total	8,378	8,394	7,912	7,057	7,031	6,824	6,454	6,542	6,501	6,005	4,684	4,592	4,617	4,523	4,376	4,572	4,340	4,211	4,259	4,432	4,186	3,755

#### Month of industrial accidents in metal products 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	665	623	649	508	608	530	490	505	547	485	446	380	404	367	324	357	360	348	337	345	318	303
February	716	678	701	545	584	535	571	571	565	548	388	359	381	411	328	376	329	369	350	367	352	329
March	765	696	732	589	635	627	588	566	533	552	429	370	442	436	378	367	371	363	369	379	337	303
April	633	696	599	619	558	567	503	521	536	469	392	337	345	392	401	412	346	343	329	327	344	326
May	653	658	641	624	602	460	502	493	536	489	337	342	334	347	332	380	342	315	315	350	350	284
June	714	687	691	591	611	611	613	564	558	533	382	432	387	373	318	408	380	367	368	394	340	291
July	775	797	725	664	627	649	604	544	591	549	432	441	381	413	449	405	447	385	397	432	458	326
August	716	745	663	561	588	521	589	593	567	493	365	416	415	404	352	377	354	375	361	395	338	321
September	768	743	635	607	599	610	532	576	523	491	411	422	393	373	376	379	348	373	371	351	343	328
October	675	737	693	681	622	622	527	589	560	527	374	354	365	347	419	426	413	338	400	416	366	335
November	643	681	613	569	499	576	505	556	496	464	400	390	403	345	384	349	350	336	329	356	334	297
December	655	653	570	499	498	516	430	464	489	405	328	349	367	315	315	336	300	299	333	320	306	312
total	8,378	8,394	7,912	7,057	7,031	6,824	6,454	6,542	6,501	6,005	4,684	4,592	4,617	4,523	4,376	4,572	4,340	4,211	4,259	4,432	4,186	3,755

Prefecture of industrial accidents in metal products 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	272	254	241		187		170	171	164	153	115	101	103	97	103	112	119	103	117	104	91	99
Aomori	41	34	43		26		34	33	29	38	21	14	23	25	19	21	23	17	32	31	32	21

Iwate	63	64	51		50		41	34	24	24	20	29	20	30	28	27	25	31	22	18	29	23
Miyagi	86	72	65		64		61	56	59	60	45	62	48	45	46	46	45	53	43	57	41	47
Akita	53	48	34		25		28	41	28	33	40	14	32	22	37	29	30	22	30	22	22	16
Yamagata	57	60	63		58		48	65	52	41	36	37	37	35	49	34	41	39	35	40	36	32
Fukushima	106	112	116		93		90	88	97	81	61	67	70	69	60	67	57	41	50	55	47	55
Ibaraki	232	278	235		205		149	185	166	163	114	136	146	159	165	156	141	145	154	149	141	118
Tochigi	140	142	129		120		126	107	98	104	97	61	74	76	75	73	84	104	81	82	70	65
Gunma	236	245	208		202		216	199	197	212	127	139	129	136	133	141	111	123	118	136	109	112
Saitama	378	353	364		350		318	313	302	311	252	213	209	236	224	239	201	215	191	208	198	196
Chiba	331	330	346		334		303	299	277	282	265	236	218	212	186	217	239	209	188	199	192	199
Tokyo	367	337	281		259		226	226	237	199	145	126	138	146	118	114	129	122	110	135	90	93
Kanagawa	369	372	356		270		267	273	240	218	197	183	165	172	166	172	169	133	159	153	152	116
Niigata	335	289	266		249		179	243	219	183	144	174	167	160	166	173	153	144	134	143	192	159
Toyama	132	134	141		101		93	100	69	94	81	84	63	77	76	67	63	77	78	69	58	60
Ishikawa	59	91	73		52		71	68	72	53	31	31	41	37	61	41	38	38	51	47	24	29
Fukui	47	45	46		29		34	28	41	34	27	25	28	36	39	28	33	37	29	37	32	22
Yamanashi	33	40	38		35		29	21	26	35	14	21	16	18	26	23	20	21	22	25	29	24
Nagano	108	107	111		108		113	104	91	94	73	76	66	79	72	77	81	73	85	73	76	71
Gifu	191	196	177		187		140	160	153	146	109	127	119	114	111	120	112	116	111	113	95	82
Shizuoka	351	324	276		279		246	268	261	269	173	181	188	189	194	188	192	162	181	206	208	191



Aichi	782	744	732		655		585	579	610	515	409	388	414	381	398	424	393	391	376	404	420	367
Mie	178	181	159		154		123	115	144	141	89	99	108	87	103	110	119	85	89	89	95	71
Shiga	68	103	86		102		76	83	85	76	57	55	50	54	76	77	58	60	72	64	60	41
Kyoto	119	120	134		73		84	86	101	84	70	66	67	63	65	63	63	54	63	46	58	60
Osaka	1,192	1,258	1,167		982		971	985	943	775	691	675	625	602	559	574	499	530	505	520	512	417
Hyogo	403	496	447		411		393	384	364	363	284	289	290	262	236	233	257	197	231	273	208	207
Nara	70	69	51		67		77	55	66	50	40	50	44	57	43	64	44	41	40	59	57	37
Wakayama	60	63	53		54		46	47	60	65	49	40	49	59	23	37	39	47	47	42	29	32
Tottori	17	22	18		14		12	15	15	15	10	6	6	10	9	13	9	7	14	13	9	8
Shimane	19	21	27		13		20	15	14	17	17	14	7	5	4	12	8	14	12	18	10	14
Okayama	149	125	130		122		109	120	124	86	74	69	76	79	69	78	80	68	83	73	64	70
Hiroshima	280	276	259		229		225	216	195	196	131	139	162	151	147	143	130	157	138	163	121	109
Yamaguchi	111	75	94		97		68	82	66	73	38	51	45	46	37	43	45	46	42	39	48	50
Tokushima	38	34	28		27		29	19	25	11	13	23	18	17	23	17	14	18	22	22	19	14
Kagawa	109	103	110		95		88	69	108	80	56	72	65	67	60	55	61	53	56	63	75	59
Ehime	109	101	103		105		86	84	89	88	67	67	64	49	43	51	50	51	57	49	51	48
Kochi	37	40	22		40		35	31	32	30	17	11	15	21	15	25	17	10	20	16	28	10
Fukuoka	289	305	295		243		204	195	275	232	173	138	181	150	164	174	170	155	166	159	144	123
Saga	50	37	39		35		21	26	38	49	31	31	38	33	21	39	34	35	33	35	20	32
Nagasaki	98	61	77		56		65	68	73	76	50	44	55	58	38	53	49	58	47	49	70	50





traffic accident (others)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
reaction to motion/improper motion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
others	1	0	0	0	0	1	1	1	0	0	0	0	3	1	0	1	1	0	0	2	0	0
unclassifiable	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17

Causal agents (middle) of fatal accidents in metal products in 1999-2020

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
engine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0
woodworking machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
construction machine	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	1	1	1	0	0	0
metal manufacturing machine	8	9	6	8	5	9	2	9	5	3	1	5	2	7	7	4	3	4	0	2	1	4
general machine	1	2	1	1	2	0	1	3	2	0	1	2	2	1	0	0	4	1	1	1	0	2
mobile silviculture machine																	0	0	0	0	0	0
crane	5	7	6	9	8	8	12	4	5	7	8	5	4	2	4	3	3	8	4	4	6	2
conveying machine	9	6	5	6	7	6	3	3	2	1	3	5	7	4	5	5	1	1	2	0	4	3

vehicle	4	1	5	2	2	2	0	0	1	0	1	0	1	0	0	0	0	1	1	1	0	0
pressure vessel	0	0	1	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0
welding equipment	2	0	1	1	2	0	0	0	0	1	0	0	1	1	0	0	2	2	0	0	0	0
kiln, caldron	3	0	1	0	2	2	0	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0
electric equipment	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	1	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
tools	5	4	6	9	7	6	6	6	7	9	4	1	4	2	3	2	3	4	2	0	1	1
other equipments, facilities	1	3	0	0	0	1	1	0	3	1	0	1	0	0	0	2	0	2	0	2	0	0
temporary buildings, establishments	5	7	5	1	0	6	2	5	3	2	2	2	2	3	1	1	3	3	2	4	1	1
hazards, harmful substances	2	4	0	3	5	2	2	1	5	0	2	0	1	3	3	0	2	0	2	0	0	0
materials	5	8	7	8	4	3	6	4	9	6	3	6	3	4	7	2	6	3	6	3	4	3
load	2	1	0	1	3	2	1	0	1	2	0	1	2	1	0	1	0	1	1	1	1	0
natural environment	3	0	2	2	2	0	2	1	0	1	0	2	16	1	2	1	0	1	0	4	0	1
other causal agent	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
no causal agent	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0
unclassifiable	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17

Causal agents (small) of fatal accidents in metal products 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0
circular sawing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
excavating machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
foundation work machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0









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	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power cranes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power hauling equipment	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
human power machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ladder	2	0	2	3	2	0	0	1	2	2	0	0	1	1	0	0	0	0	2	0	0	0
slinging tool	3	4	4	5	5	3	6	5	5	6	3	0	3	1	3	2	3	4	0	0	1	1
other tools	0	0	0	1	0	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
other equipment, facilities	1	3	0	0	0	1	1	0	3	1	0	1	0	0	0	2	0	2	0	2	0	0
scaffolding	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
timbering	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
stairs, landing stage	0	1	0	0	0	1	0	3	0	0	0	0	0	1	0	0	0	0	0	2	0	0
opening	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
roof, beam, haze, crossbeam, principal rafter	2	1	1	0	0	4	1	0	0	0	1	1	1	0	1	0	1	2	1	1	1	0
working platform, boot	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	0	1	0	0



water	0	0	0	0	0	0	0	0	1	0	0	0	0	16	0	0	0	0	0	0	0	0	0
abnormal environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0
high/cold temperature environment	1	0	2	1	1	0	1	0	0	1	0	2	0	1	2	1	0	0	0	1	0	1	
other environments	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
other causal agent	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	
no causal agent	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	0	
unclassifiable	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17	

#### Workers age of fatal accidents in metal products 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	2	1	0	0	1	1	1	0	1	0	0	0	0	0	0	2	1	1	1	0	1	0
20-29	7	5	8	4	4	4	4	3	8	3	6	4	6	4	5	2	0	3	4	3	2	2
30-39	7	2	6	12	6	7	4	7	4	3	6	6	10	5	5	2	8	4	3	3	4	2
40-49	7	11	11	7	7	7	11	3	5	6	4	6	11	9	7	3	7	7	4	5	3	3
50-59	27	26	11	18	17	21	12	15	12	8	7	10	10	6	6	5	9	7	5	7	2	3
60 years old or more	9	7	11	11	14	9	10	10	14	15	8	4	10	7	9	10	5	11	6	6	8	7
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17

## Workers' number of workplace of fatal accidents in metal products 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	24	16	15	20	16	20	7	12	15	12	7	11	21	8	10	5	11	10	5	10	6	6
10-29	16	19	14	20	16	19	17	14	19	11	14	7	15	10	9	10	10	12	7	8	6	4
30-49	9	7	9	4	6	3	8	4	3	7	7	7	3	5	6	3	5	8	5	2	3	3
50-99	6	5	4	3	5	2	4	4	4	2	1	2	5	6	3	3	1	2	2	0	3	2
100-299	3	4	4	3	4	5	4	4	2	3	0	2	3	2	3	3	2	1	3	3	2	1
300 workers or more	1	1	1	2	2	0	2	0	1	0	2	1	0	0	1	0	1	0	1	1	0	1
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17

## Month of fatal accidents in metal products 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	4	6	1	4	3	3	5	2	6	2	5	3	0	3	0	2	4	0	2	2	2	0
February	3	3	6	5	2	3	6	6	7	1	3	2	2	2	1	3	3	5	5	0	0	3
March	4	5	3	4	5	7	4	5	6	5	2	3	21	3	7	2	1	5	1	0	4	0
April	5	8	6	4	6	6	5	1	0	4	1	1	3	1	0	0	1	1	3	1	2	0
May	3	2	2	3	3	3	3	3	5	1	3	2	2	1	3	5	2	2	2	2	1	2
June	7	3	4	8	6	1	6	2	0	4	3	2	4	2	3	0	2	5	1	0	2	1

July	5	5	8	7	3	4	2	2	4	5	2	2	2	4	7	1	2	4	1	2	1	4
August	6	4	2	0	9	6	2	2	2	3	0	3	4	4	0	1	2	3	2	5	0	1
September	6	3	3	5	4	7	2	6	4	2	5	3	2	5	2	2	4	3	2	5	3	1
October	4	6	7	4	4	5	2	3	6	2	2	2	2	0	3	3	6	0	3	4	1	3
November	5	5	3	6	1	2	2	5	1	3	2	2	3	3	3	1	3	2	1	0	3	2
December	7	2	2	2	3	2	3	1	3	3	3	5	2	3	3	4	0	3	0	3	1	0
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17

Prefecture of fatal accidents in metal products 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	2	1	0	2	1	3	1	1	0	0	0	0	1	1	0	1	2	1	1	0	1	0
Aomori	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	2	0	0
Iwate	0	0	0	0	0	1	2	1	0	0	0	0	2	0	0	0	0	1	0	0	0	0
Miyagi	0	1	0	0	0	1	1	0	1	0	0	0	12	0	0	0	1	0	0	0	0	0
Akita	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Yamagata	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Fukushima	2	0	1	0	3	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	3	0
Ibaraki	1	2	2	4	2	0	3	0	2	3	3	3	0	2	1	1	0	1	1	1	0	1
Tochigi	2	1	3	1	1	1	1	2	0	0	0	1	1	1	0	2	0	0	0	0	0	0

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

Wakayama	2	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	2	1	0	0	0
Tottori	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Shimane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okayama	0	0	1	0	1	1	0	1	2	0	2	1	2	2	0	0	2	1	1	0	0	0
Hiroshima	0	2	1	1	0	2	0	0	1	1	2	1	0	1	0	1	0	0	2	0	3	0
Yamaguchi	0	0	1	1	1	1	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0
Tokushima	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0
Kagawa	2	0	0	1	1	1	1	0	0	1	0	0	1	1	2	0	0	0	0	0	0	0
Ehime	0	0	0	1	1	1	1	1	2	1	1	1	0	0	0	0	0	2	1	0	0	1
Kochi	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Fukuoka	2	1	1	3	2	1	2	0	0	1	1	1	3	1	1	1	1	2	0	0	2	0
Saga	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Nagasaki	1	0	0	3	0	0	2	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0
Kumamoto	0	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0
Oita	0	1	0	0	0	0	2	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Miyazaki	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Kagoshima	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Okinawa	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
total	59	52	47	52	49	49	42	38	44	35	31	30	47	31	32	24	30	33	23	24	20	17



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

Return to [https://www.jisha.or.jp/english/statistics/2020e\\_industry.html](https://www.jisha.or.jp/english/statistics/2020e_industry.html)