

Industrial accidents in railroad service in Japan in 1999-2020

railroad service industry Code No.040101

Type of accidents in railroad service 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	63	52	49	54	65	73	62	69	61	55	61	61	59	58	46	50	48	55	54	66	65	62
falling to same level	84	71	59	52	74	85	76	62	72	70	76	84	80	103	88	87	83	81	87	88	74	75
crash	18	21	17	26	22	20	25	39	25	22	27	20	12	22	25	29	15	25	24	26	21	27
struck by flying or falling object	13	12	10	10	10	13	11	9	9	8	7	8	12	10	2	4	6	6	7	9	5	12
collapse	1	1	3	-	0	1	1	4	1	2	0	0	1	5	1	1	4	1	1	1	3	0
crashed by	18	14	18	12	9	16	18	11	16	9	15	10	7	16	16	13	7	14	6	4	17	6
caught in/between	41	38	31	24	32	44	40	46	40	39	33	34	27	30	56	29	27	26	39	26	33	27
cut	5	4	6	1	7	8	6	4	5	8	9	7	4	5	9	6	6	1	6	6	5	2
injury to the sole of the foot	0	0	1	-	0	2	1	1	0	1	0	1	3	0	0	0	1	0	2	0	0	2
drown	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	2	3	4	2	1	2	2	3	3	0	4	1	2	1	3	3	2	5	4	7	4	6
contact to harmful substance	0	1	0	-	2	1	0	0	1	0	0	1	2	0	0	1	3	1	0	0	0	1
electric shock	2	5	2	4	2	-	4	2	5	3	1	2	1	1	3	2	2	2	0	3	0	2
explosion	0	0	0	-	0	-	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0
burst	0	0	0	-	0	-	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
fire	0	0	0	-	0	-	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
traffic accident (public road)	12	9	14	10	15	10	13	11	12	7	14	3	8	4	11	5	11	2	2	11	5	6
traffic accident (others)	3	6	3	3	6	3	8	11	4	2	2	4	1	2	3	3	2	0	4	0	5	1
reaction to motion/improper motion	46	51	40	55	62	42	33	57	66	54	49	52	66	61	65	52	49	51	67	47	63	80
others	13	14	15	14	7	8	19	12	11	27	14	14	16	17	8	10	18	13	8	14	14	21

unclassifiable	6	2	5	8	11	10	3	7	6	8	7	5	0	6	2	2	5	3	3	2	1	1
total	327	304	277	275	325	338	324	348	337	316	319	307	303	341	339	297	289	286	315	310	315	331

Causal agents (middle) of industrial accidents in railroad service 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	1	1	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	1	0	1	2	0	-	1	1	0	1	0	0	3	1	1	1	0	0	2	2	2	0
woodworking machine	1	0	1	-	2	2	0	0	0	1	0	1	1	0	0	2	1	0	0	0	1	0
construction machine	1	4	0	-	0	1	1	2	1	0	2	0	3	0	1	0	1	1	2	2	1	1
metal manufacturing machine	4	2	4	-	2	2	1	1	1	1	2	1	3	2	0	0	1	0	2	0	1	0
general machine	5	3	4	3	1	7	4	3	3	2	7	5	0	4	4	3	3	2	3	6	4	1
mobile silviculture machine																	0	0	0	0	0	0
crane	1	3	2	2	2	2	0	0	1	2	3	0	3	0	1	2	0	2	3	3	3	6
conveying machine	14	8	11	15	16	13	13	12	12	8	10	10	2	8	9	7	5	6	10	4	5	7
vehicle	48	66	53	43	63	59	66	69	66	49	64	54	59	53	74	44	38	45	43	49	57	55
pressure vessel	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	1	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
welding equipment	0	0	0	1	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	1	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	3	3	2	5	2	1	7	2	5	4	1	3	0	1	3	4	2	3	2	4	1	1
human power machine, tools	9	7	6	8	9	11	11	8	5	16	8	4	5	12	13	7	3	7	7	7	7	7
tools	23	16	16	19	10	15	17	14	15	20	9	14	13	14	15	19	8	14	14	17	10	20
other equipments, facilities	11	11	6	3	4	6	6	11	6	9	13	11	12	10	5	8	12	12	10	8	8	10
temporary buildings,	119	101	90	83	119	135	115	131	134	118	109	121	106	130	125	111	114	111	132	128	129	113

equipment																						
arc welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial dryer			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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
transmission			1	1	2	2	5	2	0	2	0	0	1	1	0	1	1	1	0	0	0	0
electric power facilities			1	1	4	0	0	1	1	0	0	1	1	2	2	2	1	2	0	1		
other electrical equipment			0	0	1	0	0	1	0	1	0	0	1	1	0	0	0	1	1	0		
human power cranes			0	0	0	1	0	3	0	0	1	0	0	0	0	0	0	0	0	0	1	
human power hauling equipment			2	4	4	5	3	2	5	2	1	6	6	4	2	4	3	2	1	4		
human power machine			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
hand tool			4	5	7	2	2	11	3	2	3	6	7	3	1	3	4	5	5	1		
ladder			13	7	11	8	7	12	5	6	8	10	8	11	5	10	6	9	5	15		
slinging tool			1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0		
other tools			2	3	6	6	6	8	4	8	5	3	7	8	3	4	8	8	5	5		
other equipment, facilities			6	4	6	11	6	9	13	11	12	10	5	8	12	12	10	8	8	10		
scaffolding			2	1	0	1	1	1	0	1	1	0	1	1	0	0	0	0	0	1		
timbering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
stairs, landing stage			18	30	28	36	38	33	25	27	23	41	27	17	28	26	43	33	37	30		
opening			2	1	4	4	1	3	4	2	2	2	4	3	2	2	3	2	3	5		
roof, beam, haze, crossbeam, principal rafter			0	2	3	4	0	0	1	1	1	1	2	1	2	0	1	1	1	0		
working platform, boot board			12	10	7	7	9	10	8	14	11	15	10	11	5	11	12	10	9	8		
passage			21	36	36	37	36	38	34	41	32	42	40	43	43	40	47	52	43	31		
building, establishment			22	24	25	26	34	18	24	21	22	14	25	24	19	16	16	17	17	18		

19 years old or less	6	4	3	7	2	3	3	6	4	6	6	4	7	6	2	3	2	3	5	4	6	3
20-29	64	67	64	60	80	77	80	72	69	56	66	58	61	72	83	59	51	62	61	62	69	82
30-39	70	62	41	53	58	58	64	78	73	69	78	68	63	82	78	61	67	53	62	51	63	65
40-49	98	72	73	75	96	97	80	96	97	86	64	69	51	64	50	49	50	56	62	67	66	62
50-59	71	86	85	65	80	87	72	76	77	77	77	78	91	94	90	98	86	87	91	86	70	68
60 years old or more	18	13	11	15	9	16	25	20	17	22	28	30	30	23	36	27	33	25	34	40	41	51
total	327	304	277	275	325	338	324	348	337	316	319	307	303	341	339	297	289	286	315	310	315	331

Workers' number of workplace of industrial accidents in railroad service 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	25	16	16	11	15	17	18	23	13	19	9	16	11	19	10	7	9	10	11	11	12	19
10-29	39	38	34	39	31	34	27	22	34	27	33	29	32	27	20	24	23	25	28	28	30	43
30-49	47	39	36	33	38	33	37	47	29	29	29	38	24	42	42	38	32	35	28	28	34	36
50-99	54	45	37	47	62	49	63	56	56	59	61	43	62	56	61	59	42	52	54	60	56	55
100-299	121	127	106	108	136	157	140	157	160	144	149	152	141	154	165	140	144	132	157	147	146	145
300 workers or more	41	39	48	37	43	48	39	43	45	38	38	29	33	43	41	29	39	32	37	36	37	33
total	327	304	277	275	325	338	324	348	337	316	319	307	303	341	339	297	289	286	315	310	315	331

Month of industrial accidents in railroad service 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	25	22	30	33	36	27	36	35	27	37	32	40	53	33	45	33	34	27	35	35	44	30
February	40	30	26	25	31	37	37	37	31	32	31	32	29	37	39	35	33	29	31	37	32	31
March	38	29	29	34	31	34	27	30	39	31	31	32	27	42	29	32	30	33	29	22	27	32
April	27	21	16	16	28	28	25	30	24	22	39	31	20	23	27	29	18	24	29	26	31	24
May	25	17	21	19	25	21	25	20	24	16	19	24	19	30	18	19	16	23	11	21	21	23
June	24	26	24	22	32	22	25	37	22	21	21	24	16	33	24	19	25	19	28	22	19	28
July	23	27	25	29	23	27	16	29	24	27	22	22	22	27	25	16	30	31	28	21	22	18
August	24	28	27	20	27	17	22	20	24	21	26	25	17	15	26	25	16	20	21	30	20	27
September	23	28	17	18	24	41	32	26	39	22	27	20	26	32	26	26	27	22	25	31	23	26
October	28	22	17	16	29	22	16	26	29	26	25	17	19	26	31	15	18	18	20	17	28	27
November	28	27	25	24	18	28	30	29	27	28	22	22	23	19	22	16	23	18	23	19	23	20
December	22	27	20	19	21	34	33	29	27	33	24	18	32	24	27	32	19	22	35	29	25	45

total	327	304	277	275	325	338	324	348	337	316	319	307	303	341	339	297	289	286	315	310	315	331
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Prefecture of industrial accidents in railroad service 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	11	15	12		15		16	8	14	10	12	14	16	16	19	10	13	23	20	18	25	29
Aomori	2	4	2		4		8	1	3	1	3	3	5	7	2	3	0	0	0	1	3	3
Iwate	2	0	3		2		3	1	1	1	1	1	0	1	3	4	3	1	1	2	2	1
Miyagi	5	7	7		9		5	3	10	6	5	13	8	6	6	3	6	3	7	4	4	4
Akita	2	2	3		2		3	2	4	3	2	3	3	5	5	2	1	6	4	4	4	2
Yamagata	2	5	3		2		0	3	4	2	2	6	6	1	6	1	0	2	7	1	1	4
Fukushima	8	5	3		4		9	9	5	6	5	9	3	5	6	4	1	2	4	3	2	2
Ibaraki	7	7	11		11		2	7	5	1	3	3	2	7	8	4	1	1	3	0	0	3
Tochigi	2	2	2		2		0	4	3	0	1	1	2	2	1	3	1	1	2	4	1	0
Gunma	11	16	8		12		14	5	6	10	15	4	11	15	12	12	18	6	11	7	8	5
Saitama	15	9	12		15		15	21	9	17	8	14	12	16	16	10	9	10	6	7	6	14
Chiba	22	16	15		24		22	14	15	8	14	11	12	15	11	16	11	15	16	13	14	13
Tokyo	48	25	41		45		36	53	47	55	42	59	42	51	31	38	46	46	43	43	47	37
Kanagawa	18	24	21		20		19	38	32	29	22	21	23	33	28	20	15	16	24	23	25	31
Niigata	24	10	9		6		7	10	12	9	9	6	8	11	6	10	2	8	8	4	5	11
Toyama	1	4	2		6		2	2	2	0	1	3	4	1	1	1	6	2	3	4	5	4
Ishikawa	1	0	1		2		2	3	4	2	0	1	1	1	2	1	3	4	2	8	5	2
Fukui	1	8	2		1		1	1	0	4	3	2	1	2	0	2	0	1	1	0	0	3
Yamanashi	1	0	3		4		2	3	1	1	2	0	1	0	2	0	1	2	2	1	0	2
Nagano	30	18	15		25		29	21	25	24	26	17	23	24	30	33	25	20	24	27	32	37
Gifu	0	4	2		2		6	4	4	3	2	5	3	2	3	2	2	0	4	5	3	1
Shizuoka	2	3	4		11		4	3	7	8	5	3	6	8	4	6	5	4	3	6	3	1
Aichi	11	11	10		3		18	18	17	10	18	11	12	15	13	12	14	6	9	12	11	7
Mie	5	0	4		2		4	4	3	3	4	2	2	1	4	0	3	5	2	2	4	2
Shiga	2	7	4		3		1	5	2	1	1	4	6	4	6	3	1	5	1	1	1	4
Kyoto	6	1	2		1		9	8	8	3	8	4	9	8	16	17	7	11	11	12	10	11
Osaka	28	36	28		33		27	32	31	37	40	30	26	33	33	23	27	28	31	39	33	28
Hyogo	15	14	11		5		12	12	10	10	5	13	12	14	12	9	16	12	13	11	11	19
Nara	1	1	2		1		1	1	3	3	1	1	1	1	3	2	4	4	4	1	1	4
Wakayama	2	0	1		1		3	2	0	2	0	0	2	1	1	0	1	3	2	0	1	1
Tottori	2	0	0		2		1	6	0	0	2	0	0	0	0	0	2	0	0	0	1	3

construction machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
general machine	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveying machine	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
vehicle	0	1	2	1	2	1	3	6	2	1	0	1	0	0	1	1	1	1	1	0	1	
pressure vessel	0	0	0	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	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipments, facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0
hazards, harmful substances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
other causal agent	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	4	2	2	2	5	7	2	2	0	2	1	0	2	1	2	1	2	3	1	5

stone, sand, substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
machine/equipment as load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural ground, rock	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
standing tree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
water	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0
high/cold temperature environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other environments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
other causal agent	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	4	2	2	2	5	7	2	2	0	2	1	0	2	1	2	1	2	3	1	5

Workers age of fatal accidents in railroad service 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-29	0	0	2	1	1	0	3	1	0	0	0	1	0	0	0	0	0	1	0	0	0	2
30-39	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0
40-49	0	0	0	0	1	0	1	5	1	0	0	0	0	0	1	0	1	0	0	1	0	2
50-59	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	2	1	0	1
60 years old or more	0	0	2	1	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	1	0
total	0	1	4	2	2	2	5	7	2	2	0	2	1	0	2	1	2	1	2	3	1	5

Workers' number of workplace of fatal accidents in railroad service 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	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyazaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagoshima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	4	2	2	2	5	7	2	2	0	2	1	0	2	1	2	1	2	3	1	5

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