Fatal and non-fatal accidents in railway vehicle products in Japan in 1999-2022

railway vehicle products industry Code No.011503

Type of accidents in railway vehicle products in 1999-2022

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	2021	2022	total
fall from height	7	14	6	12	12	7	13	5	9	11	14	4	4	7	7	8	7	10	2	4	9	7	8	7	194
falling to same level	6	4	8	11	3	5	6	5	8	3	9	5	6	6	5	9	4	8	6	6	4	10	9	11	157
crash	1	3	3	3	1	5	1	2	5	2	4	1	2	1	2	2	1	4	1	1	5	2	7	2	61
struck by flying or falling object	11	5	7	8	10	3	3	4	8	7	5	3	1	3	3	3	3	7	7	4	4	2	2	2	115
collapse	2	2	2	1	2	1	4		2	1	2				1		2	2	1			1		2	28
crashed by	2	1	3	2		2	4	3	3	7	3		1	3		2	1	2		1	1	2	1	1	45
caught in/between	14	13	11	13	20	20	10	14	13	10	8	13	6	6	7	7	9	9	9	7	10	12	4	7	252
cut	7	5	4	1	2	2		4	4	3	4	1	3	1	4	2	4	5	3	2	4	2	4	1	72
injury to the sole of the foot																				1					1
drown																									
contact to high/low-	1	1	2		1	1	2					1			1	1			1	3	1	3	1	1	21

temperature																									
contact to harmful				1		1	1														1	2	2		8
substance				<u> </u>		I																			
electric shock		1				1									1			1		1	1		1		7
explosion																									
burst																									
fire																									
traffic accident	2								1		1				1		1	1	1	2					10
(public road)	2										I				1		•	1		2					
traffic accident																									
(others)																									
reaction to																									
motion/improper	7	7	2	4	13	10	4	6	3	6	7	2	4	2	2	4	4	5	10	7	10	8	7	3	137
motion																									
others			1					1			2	2								1			9		16
unclassifiable								1																	1
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Causal agents (large) of fatal and non-fatal accidents in railway vehicle products in 1999-2022

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine	14	8	13	7	12	10	7	10	9	11	10	8	5	3	7	5	8	11	9	8	4	6	6	4	195

crane, conveying	8	7	5	9	7	10	7	9	6	10	14	6	4	5	10	3	5	7	5	3	6	5	4	4	159
other equipment	14	16	13	11	13	13	5	8	17	9	7	5	3	6	5	13	8	16	7	12	20	10	10	7	248
temporary																									
buildings,	8	11	8	17	12	9	14	5	13	7	15	7	6	9	7	12	9	13	9	8	7	12	16	14	248
establishments																									
substance,	11	9	5	7	10	11	7	6	6	8	6	2	4	3	4	2	4	4	3		6	6	7	4	135
material													ľ		•		•	•						•	
load	2	1	4	2	4	1	4	2	2	3	3						1	1	4	1		3	1	1	40
environment									1			1	1	1		1			1	4	1	3		1	15
others	3	4	1	3	6	4	4	5	2	2	4	3	4	2	1	2	1	2	3	4	6	6	11	2	85
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Causal agents (middle) of fatal and non-fatal accidents in railway vehicle products in 1999-2022

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	2021	2022	total
engine																								1	1
power																									
transmission					1	1		1	1			1							1						6
mechanism																									
woodworking								1	1	1	1		1		1	1				1	1				o
machine									'				<u> </u>		<u> </u>										

construction																									
machine																									
metal																									
manufacturing	10	7	11	7	9	8	4	4	6	8	8	5	4	2	5	2	5	9	7	5	2	3	5	1	137
machine																									
general machine	4	1	2		2	1	3	4	1	2	1	2		1	1	2	3	2	1	2	1	3	1	2	42
mobile silviculture																									
machine																									
crane	2	2	1	2	2	4	1	4		3	3	2	1	2	4	1			4	1	3		1		43
conveying	1	2	3	6	2	2	2	3	2	4	10	2	2		2	2		2	1		1			3	63
machine	ľ	3	3	0	3	2	3	3	3	4	10	3	2		3	2	2	3	1			2		3	03
vehicle	5	2	1	1	2	4	3	2	3	3	1	1	1	3	3		3	4		2	2	3	3	1	53
pressure vessel			1																						1
chemical facilities																									
welding		1				1						1								1					12
equipment			I			I	2		2							2						I			12
kiln, caldron																									
electric equipment		1			1	1		1												1	2		1		8
human power		1						1		1		1							1						
machine, tools	4	1	2	3		2		I	5	1	1	I	1	ľ	4	6		6	1	4	6	4	3	2	60
tools	6	11	4	5	10	6	2	5	9	8	6	1	1	4		2	5	9	5	6	7	5	5	4	126
other equipments,																									

facilities	4	2	5	3	1	3	1	1	1			2	1	1	1	3	3	1	1		5		1	1	41
temporary																									
buildings,	8	11	8	17	12	9	14	5	13	7	15	7	6	9	7	12	9	13	9	8	7	12	16	14	248
establishments																									
hazards, harmful substances		1		1		1									1						1	2	3		10
materials	11	8	5	6	10	10	7	6	6	8	6	2	4	3	3	2	4	4	3		5	4	4	4	125
load	2	1	4	2	4	1	4	2	2	3	3						1	1	4	1		3	1	1	40
natural environment									1			1	1	1		1			1	4	1	3		1	15
other causal agent	1	1				1	2	2			1									1			9		18
no causal agent	1	3	1	3	5	2	2	2	2	2	3	3	4	2	1	2	1	2	3	3	6	6	2	2	63
unclassifiable	1				1	1		1																	4
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Causal agents (small) of fatal and non-fatal accidents in railway vehicle products in 1999-2022

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	2021	2022	total
engine																								1	1
power transmission					1			1	1			1							1						5
mechanism								•	•			•							•						

circular sawing machine				1		1	1			1			1		5
band sawing machine															
wood planer machine					1			1							2
hollow chisel mortiser, wood borer															
chamfering machine, router, woodworking milling machine									1						1
chain saw															
other woodworking machines												1			1
leveling, transporting or loading machine															
excavating machine															
foundation work machine															
hardening machine															

		 <u> </u>	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>													
demolition machine																						
vehicle for high lift work																						
other construction machines																						
athe	3	2				2	2							1	3	1	1					1:
drill press, milling machine	2					1		1	2		1	1				1	1					10
grinding machine, buffing machine	3	2				1	1	2	1	1		1	2		3	4		1	1	2		25
power press		1		2		1	2		1	2		2		2	1	1		1	2	2	1	2
forging pressure hammer						1																1
shearing machine	1	1			1			1									1					5
other metal manufacturing machines	2	3		2	3		3	4	1	1	1	1		2	2		2			1		28
centrifugal machine																						
mixer, grinder																						
roll machine (except																						
machine)																						

injection molding																						
machine																						
food manufacturing																						
machine																						
printing machine																						
industrial robot													1									1
other general		2	2	3	4	1	2	1	2		1	1	1	3	2	1	2	1	3	1	2	35
power machines		_				·							ľ					·				
felling machine																						
mobile logging																						
machine																						
skyline yarding																						
machine																						
other mobile																						
silviculture machine																						
crane		1	2	1	3		3	3	1	1	1	4	1			4	1	1		1		28
mobile crane																						
derrick crane																						
elevator, lift									1									1				2
cargo lifting																						
appliance																						
gondola																						

										$\sqsubseteq$			$\square$		$\vdash$						$\vdash$	<u> </u>
lumberyard																						
equipment, logging																						
cableway																						
simple skyline																						
yarding equipment																						
other powered					1						1							1				3
crane					1																	3
truck		1	1	1			2	4	1			2	1			1					1	15
forklift				1	1	3	1	3		1				1	1				1		1	14
railway equipment		1			2					1		1		1								6
conveyor			2						1												1	4
loader																						
straddle carrier																						
rough terrain hauler																						
other powered																						1.0
conveying machines		1		1			1	3	1				1		2			1	1			12
cars, bus,																						
motorcycle						1								1	1		2					6
railway vehicle		1	2	3	2	2	3	1	1	1	3	2		2	3			2	3	3	1	35
other vehicles																						
boiler																						

pressure vessel																		
other pressure vessels		1																1
chemical facilities																		
gas welding equipment				1														1
arc welding equipment		1		1							2		1					5
other welding equipment						2		1							1			4
kiln, caldron																		
industrial dryer																		
other kiln, caldron																		
transmission					1											1		2
electric power			1										1					2
other electrical equipment														2				2
human power cranes												1			1	1	2	5
human power hauling equipment						2	1	1		3	3			2				12

human power																						
machine																						
hand tool		2	1		1	3	1			1	1	1	3		5	1	4	4	3	2		33
ladder		1	6	1	2	5	4	3		1	2		2	1	4	2	2	3	2	3	3	47
slinging tool		1	1		1	2	2		1					1		1		2	2			14
other tools		2	3	1	2	2	2	3			2			3	5	2	4	2	1	2	1	37
other equipment,		5	1	1	1	1			2	1	1	1	3	3	1	1		5		1	1	29
scaffolding			2	1		1		1		1			2	2	1			2		2		15
timbering																						
stairs, landing stage		2	3	1	1	1	2		1	2	1	1		3	3	1	2	1	1	3	1	30
opening		1		2		1		1				1	1		1		1	1	1		1	12
roof, beam, haze, crossbeam, principal rafter																						
working platform, boot board		1	2	4		3	2	2	2		2	1	2	1	4	2			2	2	3	35
passage		2	2	4	2	4	1	5	4	1	6	3	4	3	2	5	4	2	6	5	6	71
building, establishment		2	1	1	1	2	2	4		2			2				1		1	3	1	23
other temporary buildings,			2	1	1	1		2				1	1		2	1		1	1	1	2	17

establishments																						
explosive substance																						
inflammable																						
substance																						
inflammable gas																						
harmful substance																			1	2		3
radiation																						
other hazards,												1						1	1	1		4
harmful substances																						4
metal material		5	9	7	6	5	8	6	2	4	3	3	2	4	3	3		5	4	4	4	87
lumber, bamboo																						
stone, sand,						1																1
substance						I																
other materials			1												1							2
load		2	4	3	2	1	1	2						1		4	1		1			22
machine/equipment		2		1		1	2	1							1				,	1	1	12
as load		2		<b>I</b>		I									I				2	ľ		12
natural ground,																						
rock																						
standing tree																						
water																						
abnormal																						

environment																									
high/cold																									
temperature												1							1	2	1	3		1	9
environment																									
other environments									1				1	1		1				2					6
other causal agent							2	2			1									1			9		15
no causal agent			1		5		2	2	2	2	3	3	4	2	1	2	1	2	3	3	6	6	2	2	54
unclassifiable					1			1																	2
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Workers age of fatal and non-fatal accidents in railway vehicle products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
19 years old or less	5	3			1	3	1	1	5		5	2	1	1	1	2		3	1	2	3	1		3	44
20-29	16	9	10	8	10	6	7	8	8	11	10	3		3	4	4	2	9	11	4	12	8	12	7	182
30-39	5	7	7	6	13	7	10	10	12	8	9	4	7	4	7	8	6	10	8	9	11	8	7	5	188
40-49	11	8	9	11	14	14	7	8	15	6	8	9	4	6	6	8	8	11	6	8	10	16	6	7	216
50-59	15	21	18	23	17	16	12	14	6	12	17	9	11	12	8	13	11	14	7	7	4	9	18	6	300
60 years old or	8	8	5	8	9	12	11	4	10	13	10	5	4	3	8	3	9	7	8	10	10	9	12	9	195
more						12		<b>T</b>		13			<b>T</b>	5							10		12		193
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

## Workers' number of workplace of fatal and non-fatal accidents in railway vehicle products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less	12	8	5	7	14	9	6	7	6	6	7	6	3	4	6	3	3	1	5	6	4	2	2	2	134
10-29	12	6	15	8	15	10	7	7	7	10	9	4	1	2	8	1	7	9	7	7	12	15	6	4	189
30-49	7	9	2	4	6	7	9	4	6	8	4	7	4	6	4	6	7	9	6	5	3	5	7	9	144
50-99	5	9	13	9	3	8	8	7	9	8	6	6	2	4	4	6	5	7	9	6	10	13	10	9	176
100-299	7	7	7	8	13	10	10	12	15	8	13	7	11	8	7	11	8	14	6	12	11	4	12	4	225
300 workers or	17	17	7	20	13	14	8	8	13	10	20	2	6	5	5	11	6	14	8	4	10	12	18	9	257
more																									
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

## Month of fatal and non-fatal accidents in railway vehicle products in 1999-2022

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
January	2	5	6	6	4	5	5	3	3	5	5	2	7	2	6	6	1	5	5	4	4	4	5	6	106
February	6	4	5	10	5	6	4	5	7	6	3	2	2	5	3	2	1	4	2	3	4		6		95
March	8	5	6	2	4	3	7	3	2	2	3	2	1	3	4	4		4	3	2	3	3	5	6	85
April	7	2	1	7	5	6	3	4	5		8	1	1	3	1	2	3	2	1	3	5	5	12	2	89
May	5	4	3	2	7	5	3	6	7	3	5	3	1	1	1	4	4	3	2	2	4	3	2	2	82
June	6	4	4	1	5	4	3	6	3	3	11	2	3	4	5		4	4	3	5	5	6	4	2	97

July	4	6		7	5	2	3	5	4	7	5		2	2	2	5	4	3	6	4	3	6	6	2	93
August	5	7	2	8	6	3	7	3	6	5	3	4	2	4	1	3	2	9	4	3	2	9	3	2	103
September	4	7	5	3	1	6	4		6	4	1	5	1	1	3	2	3	6	2	1	6	4	1	5	81
October	4	6	7	2	10	6	1	4	3	4	5	5	2	2	3	2	3	7	4	4	7	5	3	4	103
November	7	1	1	5	11	7	4	4	6	7	5	3	4		3		7	3	1	5	5	1	4	2	96
December	2	5	9	3	1	5	4	2	4	4	5	3	1	2	2	8	4	4	8	4	2	5	4	4	95
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Prefecture of fatal and non-fatal accidents in railway vehicle products in 1999-2022

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
Hokkaido	2	4	1		2					1		3		2	2		2	2			5	2	3	1	32
Aomori					1																				1
lwate																		1							1
Miyagi	3						2	1	2	2				1	1					1		1		1	15
Akita			2		1		2	1	1	1							1		1	1	1		2	1	15
Yamagata																									
Fukushima	2	2			1				3				2			2			1	2	1	1		1	18
Ibaraki		2	1				1				1	2		1	2						2	1	1	1	15
Tochigi																							1		1
Gunma	1										1				1		1	2		1			2		9

		1		1	1	 1	1	1		1	1		1	1	1	1	1	1	1		1	1	1	
Saitama		2	4		5	4		3	3	3	2	1	1	2	3	1	2	1	1	4	7	1		50
Chiba								2								1					1			4
Tokyo	3	5	2		5	4		4	1	1	2	1	2	3	1	4	1		2	4		6	1	52
Kanagawa	8	9	6		7	11	14	5	4	2	4	1		3	5	2	7	7	7	8	1	6	7	124
Niigata		2	2		1	3	2	3	2		2				2	5	1	5	1	2	3	1	3	40
Toyama					1				1															2
Ishikawa	2				1				1			1				1								6
Fukui																								
Yamanashi													1		1						1			3
Nagano	2								1			2	1			1	1	1						9
Gifu	2	1	3						2								1						1	10
Shizuoka			2		1	1	1			1					2	2	3		1		1	1	1	17
Aichi	3	6	6		4	3	3	5	5	10	2	3	3	4	1	3	5		2	1	4	2	1	76
Mie	1		2				1		1									1			1			7
Shiga	2				1	1						1		1										6
Kyoto	1					1																		2
Osaka	12	8	7		13	2	12	10	5	14	6	5	4	3	6	5	7	12	7	4	7	15	4	168
Hyogo	3	4	3		8	4	2	7	6	7	2		4	5	3	4	6	2	5	5	10	4	8	102
Nara		1					1	2		2				1			1					2		10
Wakayama									1				1		1					1	1			5
Tottori					1				1	2		1	1	1	2						1	1		11

Shimane																									
Okayama											1	1	1	1		1			2			1	1		9
Hiroshima	1		1					1		3	1			1	1			1	3	1	1		1		16
Yamaguchi	5	4	5		6			1	3	4	4	1	1		2	5		6	1	3	6	4	2	2	65
Tokushima																									
Kagawa	1	2			1		2	1		3	1	2	1	2	2	1		1		2	1		2		25
Ehime																		1					1		2
Kochi																		3		1		1		1	6
Fukuoka	5	3	2		4		7	4	6	1	7	3	6	3		2	3	2	3	2	4	2		2	71
Saga										1															1
Nagasaki		1																							1
Kumamoto																								1	1
Oita																			1						1
Miyazaki																									
Kagoshima	1										1														2
Okinawa																									
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	55	37	1,125

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more.

Data of 2022 year do not include Covid-19 cases. Data of 2020 & 2021 year include Covid-19 cases. Fatal and non-fatal data are same situation.

Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

Return to https://ww	w.jish	a.or.jp	o/engl	ish/sta	atistic	s/2022	2e_inc	dustry.	<u>html</u>																
======================================	==== way v	==== ehicle	==== prod	==== ucts ir	==== n Japa	==== n in 1	==== 999-2	==== 022	====	====	====		:====	:=											
railway vehicle produ	ıcts in	dustry	/ Code	e No.0	11503	3																			
Type of fatal acciden	ts in ra	ailway	vehic	le pro	ducts	in 19	99-20	22																	
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	2021	2022	total
fall from height	1			1		1											1								4
falling to same level																									
crash																									
struck by flying or														1				1							2
falling object																									
collapse																									
crashed by																									
caught in/between		1					1	1		1			1												5
cut																									

Data sources: <a href="https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html">https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html</a> (MHLW, Japan)

injury to the sole of

the foot

	$\vdash$	<u> </u>		$\vdash$	$\vdash$			$\square$	$\vdash \vdash$	$\vdash \vdash$	$\parallel$	$\vdash \vdash$	$\vdash \vdash$	$\vdash \vdash$	$\vdash$	$\vdash \vdash$		$\vdash\vdash\vdash$	$\vdash$	$\vdash \vdash$		
drown																						
contact to																						
high/low-																						
temperature																						
contact to harmful																						
substance																						
electric shock																						
explosion																						
burst																						
fire																						
traffic accident																						
(public road)																						
traffic accident																						
(others)																						
reaction to																						
motion/improper																						
motion																						
others																						
unclassifiable																						
total	1	1		1		1	1	1		1			1	1		1	1					11

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine							1			1								1							3
crane, conveying				1				1					1				1								4
machine				•				•					•				•								
other equipment		1																							1
temporary																									
buildings,	1					1																			2
establishments																									
substance, material														1											1
load																									
environment																									
others																									
total	1	1		1		1	1	1		1			1	1			1	1							11

Causal agents (middle) of fatal accidents in railway vehicle products in 1999-2022

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	2021	2022	total
engine																									
power transmission																									
mechanism																									

woodworking machine															
construction machine															
metal															
manufacturing				1		1									2
machine															
general machine											1				1
mobile silviculture machine															
crane								1							1
conveying machine		1			1										2
vehicle										1					1
pressure vessel															
chemical facilities															
welding equipment															
kiln, caldron															
electric equipment															
human power machine, tools															
tools															
other equipments,															

facilities		1															1
temporary																	
buildings,	1			1													2
establishments																	
hazards, harmful																	
substances																	
materials										1							1
load																	
natural																	
environment																	
other causal agent																	
no causal agent																	
unclassifiable																	
total	1	1	1	1	1	1	1		1	1		1	1				11

Causal agents (small) of fatal accidents in railway vehicle products in 1999-2022

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	2021	2022	total
engine																									
power transmission																									
mechanism																									

circular sawing machine													
band sawing machine													
wood planer machine													
hollow chisel mortiser, wood borer													
chamfering machine, router, woodworking milling machine													
chain saw													
other woodworking machines													
leveling, transporting or loading machine													
excavating machine													
foundation work machine													
hardening machine													

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demolition machine														
vehicle for high lift														
work														
other construction														
machines														
lathe														
drill press, milling														
machine														
grinding machine,														
buffing machine														
power press						1								1
forging pressure														
hammer														
shearing machine														
other metal														
manufacturing				1										1
machines														
centrifugal machine														
mixer, grinder														
roll machine (except														
printingroll														
machine)														

injection molding machine													
food manufacturing machine													
printing machine													
industrial robot													
other general power machines									1				1
felling machine													
mobile logging machine													
skyline yarding machine													
other mobile silviculture machine													
crane						1							1
mobile crane													
derrick crane													
elevator, lift													
cargo lifting													
gondola													

	الصلا	 		$\Box$	 		$\sqsubseteq$	$\Box$		$\Box$		$\square$	$\sqsubseteq$		 
lumberyard equipment, logging cableway															
simple skyline yarding equipment															
other powered crane															
truck															
forklift			1												1
railway equipment					1										1
conveyor															
loader															
straddle carrier															
rough terrain hauler															
other powered conveying machines															
cars, bus, motorcycle															
railway vehicle											1				1
other vehicles															
boiler															

pressure vessel													
other pressure													
vessels													
chemical facilities													
gas welding													
equipment													
arc welding													
equipment													
other welding													
equipment													
kiln, caldron													
industrial dryer													
other kiln, caldron													
transmission													
electric power													
facilities													
other electrical													
equipment													
human power													
cranes													
human power													
hauling equipment													

human power														
machine														
hand tool														
ladder														
slinging tool														
other tools														
other equipment,		1												1
scaffolding														
timbering														
stairs, landing stage														
opening														
roof, beam, haze,														
crossbeam,	1													1
principal rafter														
working platform,				1										1
boot board				'										
passage														
building,														
establishment														
other temporary														
buildings,														

establishments												
explosive substance												
inflammable												
substance												
inflammable gas												
harmful substance												
radiation												
other hazards,												
harmful substances												
metal material						1						1
lumber, bamboo												
stone, sand,												
substance												
other materials												
load												
machine/equipment												
as load												
natural ground,												
rock												
standing tree												
water												
abnormal												

environment																	
high/cold																	
temperature																	
environment																	
other environments																	
other causal agent																	
no causal agent																	
unclassifiable																	
total	1	1	1	1	1	1	1		1	1		1	1				11

Workers age of fatal accidents in railway vehicle products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
19 years old or less																									
20-29	1									1															2
30-39							1	1																	2
40-49						1																			1
50-59		1		1									1	1			1	1							6
60 years old or																									
more																									
total	1	1		1		1	1	1		1			1	1			1	1							11

Workers' number of workplace of fatal accidents in railway vehicle products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less																									
10-29	1									1															2
30-49		1																							1
50-99														1											1
100-299							1	1					1												3
300 workers or				1		1											1	1							4
more				•		•												•							•
total	1	1		1		1	1	1		1			1	1			1	1							11

Month of fatal accidents in railway vehicle products in 1999-2022

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
January																									
February						1																			1
March																									
April							1						1	1				1							4
May										1															1
June	1																								1

July		1															1
August						1											1
September																	
October																	
November			1														1
December												1					1
total	1	1	1	1	1	1	1		1	1		1	1				11

Prefecture of fatal accidents in railway vehicle products in 1999-2022

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
Hokkaido	1																1								2
Aomori																									
lwate																									
Miyagi								1																	1
Akita																									
Yamagata																									
Fukushima																									
Ibaraki																									
Tochigi																									
Gunma																									

Saitama															
Chiba															
Tokyo															
Kanagawa				1											1
Niigata															
Toyama															
Ishikawa															
Fukui															
Yamanashi															
Nagano															
Gifu						1									1
Shizuoka															
Aichi			1												1
Mie															
Shiga															
Kyoto															
Osaka	1														1
Hyogo		1													1
Nara															
Wakayama									1						1
Tottori								1							1

Shimane																	
Okayama																	
Hiroshima																	
Yamaguchi													1				1
Tokushima																	
Kagawa																	
Ehime																	
Kochi																	
Fukuoka																	
Saga																	
Nagasaki																	
Kumamoto																	
Oita																	
Miyazaki																	
Kagoshima																	
Okinawa																	
total	1	1	1	1	1	1	1		1	1		1	1				11

Data sources: <a href="https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html">https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html</a> (MHLW, Japan)