

Industrial accidents in railway vehicle products in Japan in 1999-2020

railway vehicle products industry Code No.011503

Type of accidents in railway vehicle 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	7	14	6	12	12	7	13	5	9	11	14	4	4	7	7	8	7	10	2	4	9	7
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
crash	1	3	3	3	1	5	1	2	5	2	4	1	2	1	2	2	1	4	1	1	5	2
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
collapse	2	2	2	1	2	1	4	0	2	1	2	0	0	0	1	0	2	2	1	0	0	1
crashed by	2	1	3	2	0	2	4	3	3	7	3	0	1	3	0	2	1	2	0	1	1	2
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
cut	7	5	4	1	2	2	0	4	4	3	4	1	3	1	4	2	4	5	3	2	4	2
injury to the sole of the foot	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
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	1	1	2	-	1	1	2	0	0	0	0	1	0	0	1	1	0	0	1	3	1	3
contact to harmful substance	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
electric shock	0	1	0	-	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0
explosion	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
burst	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
fire	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
traffic accident (public road)	2	0	0	-	0	-	0	0	1	0	1	0	0	0	1	0	1	1	1	2	0	0
traffic accident (others)	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	7	7	2	4	13	10	4	6	3	6	7	2	4	2	2	4	4	5	10	7	10	8
others	0	0	1	-	0	-	0	1	0	0	2	2	0	0	0	0	0	0	0	1	0	0

unclassifiable	0	0	0	-	0	-	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51

Causal agents (middle) of industrial accidents in railway vehicle 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
power transmission mechanism	0	0	0	-	1	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0
woodworking machine	0	0	0	-	0	-	0	1	1	1	1	0	1	0	1	1	0	0	0	1	1	0
construction machine	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	10	7	11	7	9	8	4	4	6	8	8	5	4	2	5	2	5	9	7	5	2	3
general machine	4	1	2	-	2	1	3	4	1	2	1	2	0	1	1	2	3	2	1	2	1	3
mobile silviculture machine																	0	0	0	0	0	0
crane	2	2	1	2	2	4	1	4	0	3	3	2	1	2	4	1	0	0	4	1	3	0
conveying machine	1	3	3	6	3	2	3	3	3	4	10	3	2	0	3	2	2	3	1	0	1	2
vehicle	5	2	1	1	2	4	3	2	3	3	1	1	1	3	3	0	3	4	0	2	2	3
pressure vessel	0	0	1	-	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
welding equipment	0	1	1	-	0	1	2	0	2	0	0	1	0	0	0	2	0	0	0	1	0	1
kiln, caldron	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	1	0	-	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0
human power machine, tools	4	1	2	3	1	2	0	1	5	1	1	1	1	1	4	6	0	6	1	4	6	4
tools	6	11	4	5	10	6	2	5	9	8	6	1	1	4	0	2	5	9	5	6	7	5
other equipments, facilities	4	2	5	3	1	3	1	1	1	0	0	2	1	1	1	3	3	1	1	0	5	0
temporary buildings,	8	11	8	17	12	9	14	5	13	7	15	7	6	9	7	12	9	13	9	8	7	12







equipment																						
arc welding equipment			1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0		
other welding equipment			0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1		
kiln, caldron			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		
other kiln, caldron			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
transmission			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
electric power facilities			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		
other electrical equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0		
human power cranes			0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1		
human power hauling equipment			0	0	0	0	2	0	1	1	0	0	3	3	0	0	0	0	2	0		
human power machine			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
hand tool			2	1	0	1	3	1	0	0	1	1	1	3	0	5	1	4	4	3		
ladder			1	6	1	2	5	4	3	0	1	2	0	2	1	4	2	2	3	2		
slinging tool			1	1	0	1	2	2	0	1	0	0	0	0	1	0	1	0	2	2		
other tools			2	3	1	2	2	2	3	0	0	2	0	0	3	5	2	4	2	1		
other equipment, facilities			5	1	1	1	1	0	0	2	1	1	1	3	3	1	1	0	5	0		
scaffolding			0	2	1	0	1	0	1	0	1	0	0	2	2	1	0	0	2	0		
timbering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
stairs, landing stage			2	3	1	1	1	2	0	1	2	1	1	0	3	3	1	2	1	1		
opening			1	0	2	0	1	0	1	0	0	0	1	1	0	1	0	1	1	1		
roof, beam, haze, crossbeam, principal rafter			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
working platform, boot board			1	2	4	0	3	2	2	2	0	2	1	2	1	4	2	0	0	2		
passage			2	2	4	2	4	1	5	4	1	6	3	4	3	2	5	4	2	6		
building, establishment			2	1	1	1	2	2	4	0	2	0	0	2	0	0	0	1	0	1		



19 years old or less	5	3	0	-	1	3	1	1	5	0	5	2	1	1	1	2	0	3	1	2	3	1
20-29	16	9	10	8	10	6	7	8	8	11	10	3	0	3	4	4	2	9	11	4	12	8
30-39	5	7	7	6	13	7	10	10	12	8	9	4	7	4	7	8	6	10	8	9	11	8
40-49	11	8	9	11	14	14	7	8	15	6	8	9	4	6	6	8	8	11	6	8	10	16
50-59	15	21	18	23	17	16	12	14	6	12	17	9	11	12	8	13	11	14	7	7	4	9
60 years old or more	8	8	5	8	9	12	11	4	10	13	10	5	4	3	8	3	9	7	8	10	10	9
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51

Workers' number of workplace of industrial accidents in railway vehicle 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	12	8	5	7	14	9	6	7	6	6	7	6	3	4	6	3	3	1	5	6	4	2
10-29	12	6	15	8	15	10	7	7	7	10	9	4	1	2	8	1	7	9	7	7	12	15
30-49	7	9	2	4	6	7	9	4	6	8	4	7	4	6	4	6	7	9	6	5	3	5
50-99	5	9	13	9	3	8	8	7	9	8	6	6	2	4	4	6	5	7	9	6	10	13
100-299	7	7	7	8	13	10	10	12	15	8	13	7	11	8	7	11	8	14	6	12	11	4
300 workers or more	17	17	7	20	13	14	8	8	13	10	20	2	6	5	5	11	6	14	8	4	10	12
total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51

Month of industrial accidents in railway vehicle 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	2	5	6	6	4	5	5	3	3	5	5	2	7	2	6	6	1	5	5	4	4	4
February	6	4	5	10	5	6	4	5	7	6	3	2	2	5	3	2	1	4	2	3	4	0
March	8	5	6	2	4	3	7	3	2	2	3	2	1	3	4	4	0	4	3	2	3	3
April	7	2	1	7	5	6	3	4	5	0	8	1	1	3	1	2	3	2	1	3	5	5
May	5	4	3	2	7	5	3	6	7	3	5	3	1	1	1	4	4	3	2	2	4	3
June	6	4	4	1	5	4	3	6	3	3	11	2	3	4	5	0	4	4	3	5	5	6
July	4	6	0	7	5	2	3	5	4	7	5	0	2	2	2	5	4	3	6	4	3	6
August	5	7	2	8	6	3	7	3	6	5	3	4	2	4	1	3	2	9	4	3	2	9
September	4	7	5	3	1	6	4	0	6	4	1	5	1	1	3	2	3	6	2	1	6	4
October	4	6	7	2	10	6	1	4	3	4	5	5	2	2	3	2	3	7	4	4	7	5
November	7	1	1	5	11	7	4	4	6	7	5	3	4	0	3	0	7	3	1	5	5	1
December	2	5	9	3	1	5	4	2	4	4	5	3	1	2	2	8	4	4	8	4	2	5

total	60	56	49	56	64	58	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51
-------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Prefecture of industrial accidents in railway vehicle 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	4	1		2		0	0	0	1	0	3	0	2	2	0	2	2	0	0	5	2
Aomori	0	0	0		1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iwate	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Miyagi	3	0	0		0		2	1	2	2	0	0	0	1	1	0	0	0	0	1	0	1
Akita	0	0	2		1		2	1	1	1	0	0	0	0	0	0	1	0	1	1	1	0
Yamagata	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fukushima	2	2	0		1		0	0	3	0	0	0	2	0	0	2	0	0	1	2	1	1
Ibaraki	0	2	1		0		1	0	0	0	1	2	0	1	2	0	0	0	0	0	2	1
Tochigi	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gunma	1	0	0		0		0	0	0	0	1	0	0	0	1	0	1	2	0	1	0	0
Saitama	0	2	4		5		4	0	3	3	3	2	1	1	2	3	1	2	1	1	4	7
Chiba	0	0	0		0		0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	1
Tokyo	3	5	2		5		4	0	4	1	1	2	1	2	3	1	4	1	0	2	4	0
Kanagawa	8	9	6		7		11	14	5	4	2	4	1	0	3	5	2	7	7	7	8	1
Niigata	0	2	2		1		3	2	3	2	0	2	0	0	0	2	5	1	5	1	2	3
Toyama	0	0	0		1		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Ishikawa	2	0	0		1		0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0
Fukui	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yamanashi	0	0	0		0		0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Nagano	2	0	0		0		0	0	0	1	0	0	2	1	0	0	1	1	1	0	0	0
Gifu	2	1	3		0		0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0
Shizuoka	0	0	2		1		1	1	0	0	1	0	0	0	0	2	2	3	0	1	0	1
Aichi	3	6	6		4		3	3	5	5	10	2	3	3	4	1	3	5	0	2	1	4
Mie	1	0	2		0		0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1
Shiga	2	0	0		1		1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Kyoto	1	0	0		0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Osaka	12	8	7		13		2	12	10	5	14	6	5	4	3	6	5	7	12	7	4	7
Hyogo	3	4	3		8		4	2	7	6	7	2	0	4	5	3	4	6	2	5	5	10
Nara	0	1	0		0		0	1	2	0	2	0	0	0	1	0	0	1	0	0	0	0
Wakayama	0	0	0		0		0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	1
Tottori	0	0	0		1		0	0	0	1	2	0	1	1	1	2	0	0	0	0	0	1

Shimane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okayama	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	2	0	0	1
Hiroshima	1	0	1	0	0	1	0	3	1	0	0	1	1	0	0	1	3	1	1	0	
Yamaguchi	5	4	5	6	0	1	3	4	4	1	1	0	2	5	0	6	1	3	6	4	
Tokushima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kagawa	1	2	0	1	2	1	0	3	1	2	1	2	2	1	0	1	0	2	1	0	
Ehime	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Kochi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	1	
Fukuoka	5	3	2	4	7	4	6	1	7	3	6	3	0	2	3	2	3	2	4	2	
Saga	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Nagasaki	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kumamoto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Miyazaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kagoshima	1	0	0	0	0	0	0	0	1	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	
total	60	56	49	64	48	45	56	50	59	32	27	29	34	38	36	54	41	40	50	51	

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)

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

=====  
Fatal accidents in railway vehicle products in Japan in 1999-2020

railway vehicle products industry Code No.011503

Type of fatal accidents in railway vehicle 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	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
falling to same level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
crash	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
struck by flying or	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0



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	1	0	0	1	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	0	0	0	0	0	0	1	0	0	0	0
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
conveying machine	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hazards, harmful substances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
materials	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other causal agent	0	0	0	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	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	1	1	0	1	0	1	1	1	0	1	0	0	1	1	0	0	1	1	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	1	1	0	1	0	1	1	1	0	1	0	0	1	1	0	0	1	1	0	0	0	0

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)