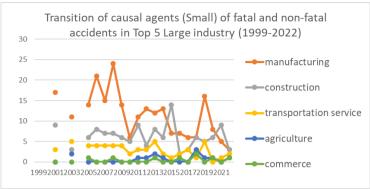
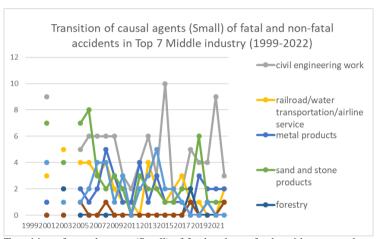
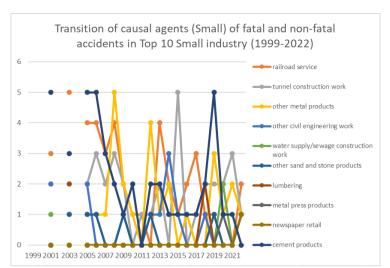
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Large industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Middle Industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Small Industry (1999-2022)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Large industry (1999-2022)

Trans	ition of causal agents (Sinan) of fai																										
code	Large industry	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	Large industry
01	manufacturing			17		11		14	21	15	24	14	6	11	13	12	13	7	7	6	6	16	8	5	3	229	manufacturing
03	construction			9		3		6	8	7	7	6	5	9	4	8	6	14	2	3	6	5	6	9	3	126	construction
04	transportation service			3		5		4	4	4	4	4	2	3	3	5	2	1	2	3	1	5		1	2	58	transportation service
06	agriculture					2								1	1	2	1				3	1	1		1	13	agriculture
08	commerce							1			1					1			1		2		1		1	8	commerce
05	cargo handling service			1		2		1		3					3		2	1		1		1	1			16	cargo handling service
17	others							2	1				1		1			1		1		1		2		10	others
14	hotel/restaurant/amusement service			2		1			1		1		1					1		1		1				9	hotel/restaurant/amusement service
02	mining			1		2		1														1				5	mining
15	commercial cleaning and livestock process					2									1					1			1			5	commercial cleaning and livestock process
09	financial business/advertisement																1				1					2	financial business/advertisement
12	education/research service																	1	1							2	education/research service
13	health and hygiene service								1																	1	health and hygiene service
07	livestock/fishery																										livestock/fishery
10	movie/play service																										movie/play service
11	telecommunication service																										telecommunication service
16	public office																										public office
	total			33		28		29	36	29	37	24	15	24	26	28	25	26	13	16	19	31	18	17	10	484	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Middle industry (1999-2022)

code	Middle industry	1999	2000	2001	2002	2003	2004	2005	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Middle industry	

0301 civil engineering work	9		2		5	6	6	6	6	3	2	4	6	3	10	1	2	5	4	4	9	3	96	civil engineering wor
railroad/water transportation/airline service	3		5		4	4	3	4	2	1	1		4	2	1	2	3	1	1			2	43	railroad/water transportation/airline service
0112 metal products	1				2	1	2	5	3	1	1	4	1	3	1	1	1		3	2	2	2	36	metal products
0109 sand and stone products	7		4		7	8	3	2	3	2		3	2	2	1	1	2	2	6	1	1	1	58	sand and stone products
0602 forestry			2															2				1	5	forestry
0802 retail					1			1										1		1		1	5	retail
0110 steel making	4		1		1	2	4	4	1	3		2	3	5	2	2	1			1			36	steel making
0115 transport equipment products	2		5		1	5		2	2		1		2	1	2	2	1	1		1			28	transport equipment products
0113 machine products			1		1	2	1	4	1		3	1	1					1					16	machine products
0303 other construction works			1		1	2		1		2	2		1	2	2		1	1					16	other construction works
0403 road cargo transportation service							1		2	1	2	3	1						4		1		15	road cargo transportation service
0302 construction work							1				5		1	1	2	1			1	2			14	construction work
0501 land cargo handling service	1		2				3					2		2	1		1		1	1			14	land cargo handling service
0104 wood products	1				2		3		2		2				1			<u> </u>		1			12	wood products
0108 chemical products							1	2			2		1	1		1		1	1				10	chemical products
1702 others			<u> </u>		1	1	<u> </u>	<u> </u>		1	<u> </u>	1			1	<u> </u>	1	<u> </u>	1		2		9	others
0101 food products	1											2	2				1		2				8	food products
0601 agriculture			<u> </u>				<u> </u>	<u> </u>		<u> </u>	1	1	2	1		<u> </u>	<u> </u>	1	1	1				agriculture
0106 pulp/paper processing products						1		2	1		1							1		1			7	pulp/paper processin products
other amusement service	1		1			1		1		1							1		1				7	other amusement service
0114 electrical equipment products						1		2				1									1		5	electrical equipment products
commercial cleaning and livestock process			2									1					1			1			5	commercial cleaning and livestock proces
0111 nonferrous metal making								1	1										1	1			4	nonferrous metal making
0117 other manufacturing	_	<u> </u>	<u> </u>		<u></u>		1	<u> </u>		<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u></u>	<u> </u>	<u> </u>	2		1			other manufacturing
0107 printing/bookbinding	_	<u> </u>		<u> </u>		1		<u> </u>		<u> </u>	1	<u> </u>	<u> </u>	1	<u> </u>		<u> </u>			printing/bookbinding				
0203 other mining			1		1		<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	1	<u> </u>			3	other mining
0102 textile products	1	<u> </u>						<u> </u>		<u> </u>		<u> </u>	<u> </u>			<u> </u>	<u> </u>		1		<u> </u>		2	textile products
0502 harbor transportation service					1							1											2	harbor transportation service
0804 other commerce													1					1					2	other commerce
0901 financial business	_	<u> </u>		<u> </u>				<u> </u>	<u> </u>			<u> </u>		1	<u> </u>		<u> </u>	1			<u> </u>		2	financial business
1201 education/research service															1	$\ _1$								education/research service

140	hotel		1												1								2	hotel
020	coal mining		1																				1	coal mining
0202	quarrying			1																			1	quarrying
080	wholesale															1							1	wholesale
1302	social welfare facility					1																	1	social welfare facility
170	dispatch service				1																		1	dispatch service
0103	fiber products																							fiber products
0105	furniture																							furniture
0116	electric/gas/water service																							electric/gas/water service
0402	road passenger transport service																							road passenger transport service
0404	other transportation service																							other transportation service
070	livestock																							livestock
0702	fishery																							fishery
0803	haircut/beauty salon																							haircut/beauty salon
0902	advertisement and mediator																							advertisement and mediator
100	movie/play service																							movie/play service
110	telecommunication service																							telecommunication service
130	medical treatment service																							medical treatment service
	other health and hygiene service																							other health and hygiene service
1402	restaurant																							restaurant
160	public office																							public office
	total		33	28	29	36	29	37	24	15	24	26	28	25	26	13	16	19	31	18	17	10	484	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Small industry (1999-2022)

code	Small industry	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	Small industry
040101	railroad service			3		5		4	4	3	4	2	1	1		4	2	1	2	3	1	1			2	43	railroad service
030102	tunnel construction work			2				2	3	2	3	2		1	1	2		5		1	2	2	2	3	1	34	tunnel construction work
011209	other metal products							1	1	1	5	2	1		4	1	2		1			3	1	2	1	26	other metal products
030199	other civil engineering work			2				2				1			1	1	3	1			1				1	13	other civil engineering work
030110	water supply/sewage construction work			1		1		1	1			1											2		1	8	water supply/sewage construction work
010909	other sand and stone products					1		1	1			1			1							1			1	7	other sand and stone products
060201	lumbering					2															2				1	5	lumbering
011203	metal press products																						1		1	2	metal press products
080205	newspaper retail																								1	1	newspaper retail
010901	cement products			5		3		5	5	3	2	1	2		2	2	1	1	1	1	2	5	1	1		43	cement products

030104	railway construction work		3	1		1	1	2	1	1		2	2		4	1		1	1		2	23	railway construction work
011001	steel/iron/rolling products		2			1	2	3		2		2	3	2		2	1			1		21	steel/iron/rolling products
011002	casting products		2	1	1	1	2	1	1					3	2							14	casting products
	machine products			1	1	2	1	2	1		3	1	1					1				14	machine products
040301	general truck transportation service						1		1	1	2	3	1						4		1	14	general truck transportation service
050101	land cargo handling service		1	2			3					2		2	1		1		1	1		14	land cargo handling service
011502	auto mobile products			1		3		1	1				1		1	1	1					10	auto mobile products
011501	ship building		1	2	1				1					1		1		1		1		9	ship building
030309	other construction works				1	1		1		2	1		1	1				1				9	other construction works
011204	metal plating products		1		1		1		1		1			1	1		1					8	metal plating products
030201	steel frame/reinforced concrete house construction work						1				5		1						1			8	steel frame/reinforced concrete house construction work
060101	agriculture										1	1	2	1				1	1	1		8	agriculture
	lumbering				2		2		1						1					1		7	lumbering
170209	others				1	1				1		1					1				2	7	others
011503	railway vehicle products		1			2					1		1		1							6	railway vehicle products
030108	sand collapse prevention civil engineering work						1	1		1								1			2	6	sand collapse prevention civil engineering work
010109	other foods											2	2						1			5	other foods
010602	paper processing products							2			1							1		1		5	paper processing products
010903	pottery products		1		1	2								1								5	pottery products
	other building construction work													1	2	1				1		5	other building construction work
	other lumber and wood products		1				1		1		1											4	other lumber and wood products
010801	non organic or organic chemical products						1				2								1			4	non organic or organic chemical products
	land consolidation civil engineering work					1			1				1				1					4	land consolidation civil engineering work
	electricity/telecommunication work					1									2		1					4	electricity/telecommunication
080209	other retails				1			1										1		1		4	other retails
	golf course		1			1		1									1					4	golf course
010701	printing service					1					1			1								3	printing service
	other ceramic products		1						1								1					3	other ceramic products
011409	other electrical equipment					1						1									1	3	other electrical equipment
	other transport equipment products			2				1														3	other transport equipment products
011709	other manufacturing						1												2			3	other manufacturing
020309	other mining			1	1														1			3	other mining
	hydroelectric plant construction work						1												1		1	3	hydroelectric plant construction work

030107	river civil engineering work		1				1				1											3	river civil engineering work
030302	machinery/apparatus setting work			1							1			1								3	machinery/apparatus setting work
010101	meat/dairy products		1																1			2	meat/dairy products
010804	petroleum/coal products												1	1								2	petroleum/coal products
010805	plastics products							1								1						2	plastics products
011109	other nonferrous metal products																		1	1		2	other nonferrous metal products
011403	electronics equipment and telecommunications apparatus							2														2	electronics equipment and telecommunications apparatus
080401	warehousing												1					1				2	warehousing
090103	insurance business													1				1				2	insurance business
120109	other education/research service														1	1						2	other education/research service
140101	hotel		1												1							2	hotel
140309	other amusement service									1									1			2	other amusement service
150101	building maintenance service			1													1					2	building maintenance service
150109	other cleaning and livestock process service			1								1										2	other cleaning and livestock process service
170201	security service														1				1			2	security service
010102	fishery products																1					1	fishery products
010203	weaving																		1			1	weaving
010209	other textile products		1																			1	other textile products
010402	plywood										1											1	plywood
010601	pulp/paper								1													1	pulp/paper
010609	other pulp/paper processing products					1																1	other pulp/paper processing products
010806	rubber products																	1				1	rubber products
010899	other chemical products							1														1	other chemical products
011009	other steel products									1												1	other steel products
011101	nonferrous metals/rolling products								1													1	nonferrous metals/rolling products
011102	nonferrous metals casting products							1														1	nonferrous metals casting products
011302	measuring instruments							1														1	measuring instruments
011205	other precision machine							1														1	other precision machine products
011703	cleaning																				1	1	cleaning
020101	general coal mining		1																			1	general coal mining
020201	quarrying			1																		1	quarrying
030103	subway construction work									1												1	subway construction work
030106	road construction work																				1	1	road construction work
030202	wooden house construction work																			1		1	wooden house construction work

040302 specific truck transportation service									1											1	specific truck transportation service
050201 general harbor transportation service											1									1	general harbor transportation service
050202 port cargo handling service						1														1	port cargo handling service
080109 other wholesale						Ē		Н							<u> </u>					1	other wholesale
130201 social welfare facility	H				H		1	H		i		\equiv					= -	= -	= -	1	social welfare facility
140302 park and amusement park				1		<u> </u>		H									_	_	_	1	park and amusement park
150103 other waste disposal service	H							H										= -	= -	1	other waste disposal service
170101 dispatch service	\vdash				\vdash	1		H									=	= -	= -	1	dispatch service
010103 agricultural food products	H							H						<u> </u>	<u> </u>		= -	\dashv			agricultural food products
010104 bread/cake products	\vdash							H						<u> </u>				$= \mid =$	_	╁	bread/cake products
010105 alcoholic drinks								Н						<u></u> -	<u> </u>					╫	alcoholic drinks
010106 soft drinks	Н							H										_		╬	soft drinks
010201 silk-reeling								Н													silk-reeling
010202 cotton-spinning	H							H									_			╬	cotton-spinning
010204 dyeing								М												╬	dyeing
010301 over/under wear								H												╦	over/under wear
010309 other fiber products	H							H						Ti-	Ti-					╁	other fiber products
010501 wood furniture								П													wood furniture
010502 metal furniture	H				H		i	H						Ti-	Ti-					╁	metal furniture
010503 fittings								П													fittings
010509 other furniture	H				H		i	H				一		Ti	Ti					╁	other furniture
010702 bookbinding								П												┰	bookbinding
other printing and																				Ī	other printing and
DOOKUIIIdilig	\square							Ш						<u></u> -	<u></u> -	_	_ _	_ _	_	╬	bookbinding
010802 chemical fiber						<u> </u>		\sqsubseteq									_	_ _	_		chemical fiber
010803 pharmaceuticals								\sqsubseteq									_		_	<u> </u>	pharmaceuticals
010807 leather products								Щ												-	leather products
010808 painting products								\square									_			<u> </u>	painting products
010809 chemical fertilizer products								Щ							<u> </u>				_	<u> </u>	chemical fertilizer products
010902 glass products								\square												<u> </u>	glass products
010904 fire resisting products	\sqsubseteq						<u> </u>	Щ								_	_ _	_ _	_	<u> </u>	fire resisting products
011201 western tableware/cutting tool products																					western tableware/cutting tool products
011202 screw products																					screw products
011303 optical instruments																					optical instruments
011304 watch products								$\overline{\Box}$												Ī	watch products
011401 heavy electrical equipment																					heavy electrical equipment
011402 electrical appliance																					electrical appliance
011601 electric utility service																					electric utility service
011602 city gas service																					city gas service
011603 city water service																					city water service

011609 other electric/gas/water service							other electric/gas/water service
011701 auto mobile servicing							auto mobile servicing
011702 machine repair							machine repair
011704 tobacco products							tobacco products
020109 other coal mining							other coal mining
020202 gravel digging							gravel digging
020209 other quarrying				i			other quarrying
020301 metal mining							metal mining
020302 petroleum mining							petroleum mining
030105 bridge construction work				i			bridge construction work
030111 port/seaside construction work							port/seaside construction work
030203 building facility construction work							building facility construction work
040102 water transportation service							water transportation service
040103 airline service							airline service
040201 taxi service							taxi service
040202 bus service				i			bus service
040209 other passenger transport service							other passenger transport service
040303 cargo/ light automobile transportation service							cargo/ light automobile transportation service
040309 other land cargo transportation service							other land cargo transportation service
040409 other transportation service							other transportation service
050209 other harbor transportation service							other harbor transportation service
060209 other forestry							other forestry
070101 livestock							livestock
070201 fishery							fishery
070209 other fishery							other fishery
080101 all kinds of wholesale							all kinds of wholesale
080102 furniture/fittings wholesale							furniture/fittings wholesale
080201 all kinds of retail							all kinds of retail
080202 auto mobile retail							auto mobile retail
080203 furniture/fittings retail							furniture/fittings retail
080204 fuel retail							fuel retail
080301 haircut							haircut
080302 beauty salon							beauty salon
080409 other commerce							other commerce
090101 banking/trust business							banking/trust business
090102 stock/commodity trade business							stock/commodity trade business

090109	other financial business																							other financial business
090201	traveling service																							traveling service
090209	other advertisement and mediator																							other advertisement and mediator
	movie production and delivery service																							movie production and delivery service
100102	movie theatre																							movie theatre
-	other movie/play service																							other movie/play service
110101	telecommunication service																							telecommunication service
120101	auto mobile practical training																							auto mobile practical training
120102	software service																							software service
130101	hospital																							hospital
130102	general clinic																							general clinic
130109	other medical treatment service																							other medical treatment service
130301	bathhouse																							bathhouse
130309	other health and hygiene service																							other health and hygiene service
140201	general restaurant																							general restaurant
140209	other restaurants																							other restaurants
150102	industrial waste management service																							industrial waste management service
150104	cremation service																							cremation service
150105	livestock process service																							livestock process service
	public office																							public office
170202	information processing service																							information processing service
	total		33	28	29	36	29	37	24	15	24	26	28	25	26	13	16	19	31	18	17	10	484	total

Data source : https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html (MHLW, Japan)

https://www.jisha.or.jp/english/statistics/202311_12.html