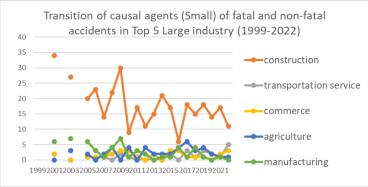
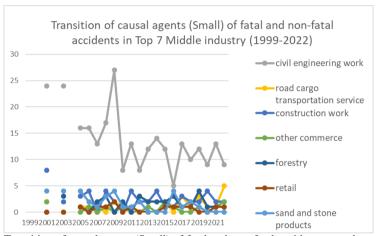
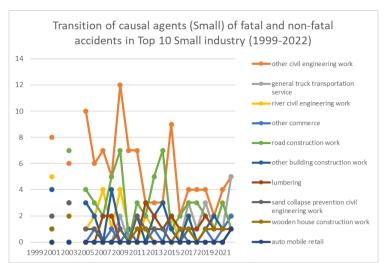
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler in Large industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler in Middle Industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler in Small Industry (1999-2022)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler in Large industry (1999-2022)

1 Tans	mon of causal agents (Sman) of fat																										
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
03	construction			34		27		20	23	14	22	30	9	17	11	15	21	17	6	18	15	18	14	17	11	359	construction
04	transportation service			2				1	1	1		2	1					2		3	1	3	2	1	5	25	transportation service
08	commerce			2				1	1	1	2	3	3	1		2		3	3	1	1	1		2	3	30	commerce
06	agriculture					3		2		2	4		4		4	2	2	2	4	6	3	4	2	1	1	46	agriculture
01	manufacturing			6		7		6	3	1	4	7	1	3	2		1	1	4	1	4	1		1		53	manufacturing
14	hotel/restaurant/amusement service			1		1		1	2		2		1	2		1		2	1	3		2	1			20	hotel/restaurant/amusement service
17	others			1		2		1			3		1			2		1								11	others
15	commercial cleaning and livestock process			1		1		1				1					1						2	1		8	commercial cleaning and livestock process
02	mining																			1	1					2	mining
05	cargo handling service								1														1			2	cargo handling service
12	education/research service			1																1						2	education/research service
07	livestock/fishery																					1				1	livestock/fishery
11	telecommunication service																							1		1	telecommunication service
16	public office																						1			1	public office
09	financial business/advertisement																										financial business/advertisement
10	movie/play service																										movie/play service
13	health and hygiene service																										health and hygiene service
	total			48		41		33	31	19	37	43	20	23	17	22	25	28	18	34	25	30	23	24	20	561	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler in Middle industry (1999-2022)

code	Middle 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	Middle industry	

0301 civil engineering work		24	24	16	16	13	17	27	8	13	8	12	14	12	5	13	10	12	9	13	9	275	civil engineering work
0403 road cargo transportation service		2		1	1	1		2	1					2		3	1	3	1	1	5	24	road cargo transportation service
0302 construction work	8	3	2	3	4		4	2		4	2	2	4	1	1	3	2	2	4	2	2	52	construction work
0804 other commerce		2			1		1		1			1		2	1			1		1	2	13	other commerce
0602 forestry			3	1		2	3		2		3	2	2	2	3	1	1	4	1	1	1	32	forestry
0802 retail				1		1	1	2		1				1	1	1	1			1	1	12	retail
0109 sand and stone products	4	4	4	4	2	1	3	4	1	1	2				4	1	2	1				34	sand and stone products
0303 other construction works		2	1	1	3	1	1	1	1		1	1	3	4		2	3	4	1	2		32	other construction works
1403 other amusement service		1	1	1	1		1		1	2		1		2	1	3		2	1			18	other amusement service
0601 agriculture				1			1		2		1				1	5	2		1			14	agriculture
1702 others		1	2	1			3		1			2		1								11	others
0117 other manufacturing][]2	2	1	1						1				1			1			1		8	other manufacturing
commercial cleaning and livestock process		1	1	1				1					1						2	1		8	commercial cleaning and livestock process
0801 wholesale								1	2			1			1							5	wholesale
0101 food products			1				1			1												3	food products
0104 wood products			1					1									1					3	wood products
0108 chemical products				1									1									2	chemical products
0202 quarrying																1	1					2	quarrying
1201 education/research service		1														1						2	education/research service
1401 hotel					1		1															2	hotel
0112 metal products								1														1	metal products
0113 machine products					1																	1	machine products
0115 transport equipment products								1														1	transport equipment products
railroad/water transportation/airline service																			1			1	railroad/water transportation/airline service
0501 land cargo handling service					1																	1	land cargo handling service
0502 harbor transportation service																			1			1	harbor transportation service
0702 fishery																		1				1	fishery
1101 telecommunication service																				1		1	telecommunication service
public office																			1			1	public office
0102 textile products																							textile products
0103 fiber products																							fiber products
0105 furniture																							furniture
																							pulp/paper processing

0106	pulp/paper processing products																							products
0107	printing/bookbinding																							printing/bookbinding
0110	steel making																							steel making
0111	nonferrous metal making																							nonferrous metal making
0114	electrical equipment products																							electrical equipment products
0116	electric/gas/water service																							electric/gas/water service
0201	coal mining																							coal mining
0203	other mining																							other mining
0402	road passenger transport service																							road passenger transport service
0404	other transportation service																							other transportation service
0701	livestock																							livestock
0803	haircut/beauty salon																							haircut/beauty salon
0901	financial business																							financial business
0902	advertisement and mediator																							advertisement and mediator
1001	movie/play service																							movie/play service
1301	medical treatment service																							medical treatment service
1302	social welfare facility																							social welfare facility
1303	other health and hygiene service																							other health and hygiene service
1402	restaurant																							restaurant
1701	dispatch service																							dispatch service
	total		48	41	33	31	19	37	43	20	23	17	22	25	28	18	34	25	30	23	24	20	561	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 227 rough terrain hauler 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
	other civil engineering work			8		6		10	6	7	5	12	7	7	3	3	3	9	2	4	4	4	2	4	5	111	other civil engineering work
040301	general truck transportation service			2				1	1			2						2		3	1	3	1	1	5	22	general truck transportation service
030107	river civil engineering work			5		3		1	2	4	1	4	1		2	1	1	2		2		1	1	1	2	34	river civil engineering work
080409	other commerce			1					1		1		1			1		2	1			1		1	2	12	other commerce
	road construction work			4		7		4	3	2	5	7		3	2	5	7	1	2	3	3	2	1	3	1	65	road construction work
030209	other building construction work			4				3	2		4	1		2		2	3	1		2		1	2	1	1	29	other building construction work
060201	lumbering					3				2	2				3	2	1	2	1	1	1	2	1	1	1	23	lumbering
030108	sand collapse prevention civil engineering work			2		3		1	1			1		2	1	1	1			1					1	15	sand collapse prevention civil engineering work
	wooden house construction																										wooden house construction

030202 _{work}		1	2								1	1				1	1		1	1	1	1	11	work
080202 auto mobile retail																						1	1	auto mobile retail
010909 other sand and stone products		4	4		4	1		3	2	1	1	2				3	1	2	1				29	other sand and stone products
030309 other construction works		2	1			3	1	1		1		1	1	2	4		2	3	3		1		26	other construction works
030109 land consolidation civil engineering work		2	3			2		2	1		1		1	1		1	3		3	2	2		24	land consolidation civil engineering work
140301 golf course		1	1		1	1		1		1	2		1		1	1	3			1			15	golf course
060101 agriculture					1			1		2		1				1	5	2		1			14	agriculture
030110 water supply/sewage construction work		1	2			2		3	1				1					1		2			13	water supply/sewage construction work
030201 steel frame/reinforced concrete house construction work		3				1			1		1	1		1				2		1			11	steel frame/reinforced concrete house construction work
060209 other forestry					1			1		2				1		2			2				9	other forestry
080209 other retails					1		1		1		1				1		1	1			1		8	other retails
170209 others		1	2		1								2		1								7	others
011702 machine repair		1	1								1				1			1			1		6	machine repair
150102 industrial waste management service					1				1					1						2	1		6	industrial waste management service
010901 cement products						1	1		2							1							5	cement products
030101 hydroelectric plant construction work		1							1									2	1				5	hydroelectric plant construction work
030301 electricity/telecommunication work					1				1					1					1	1			5	electricity/telecommunication work
030105 bridge construction work		1												1					1		1		4	bridge construction work
080109 other wholesale									1	1			1			1							4	other wholesale
170201 security service								3		1													4	security service
030102 tunnel construction work								1												1	1		3	tunnel construction work
140309 other amusement service															1				2				3	other amusement service
010105 alcoholic drinks								1			1												2	alcoholic drinks
010401 lumbering			1						1														2	lumbering
010805 plastics products					1									1									2	plastics products
020202 gravel digging																	1	1					2	gravel digging
040302 specific truck transportation service							1			1													2	specific truck transportation service
080204 fuel retail								1								1							2	fuel retail
120109 other education/research service		1															1						2	other education/research service
140101 hotel						1		1															2	hotel
150103 other waste disposal service		1	1																				2	other waste disposal service
010104 bread/cake products			1																				1	bread/cake products
010402 plywood																		1					1	plywood
011209 other metal products									1														1	other metal products
				11		11		11	11	1	11		11		11	11		11		11		1		

011301 machine products					<u> </u>		1			1						$\vdash\vdash$					1	machine products
011502 auto mobile products						1.				1											1	auto mobile products
011701 auto mobile servicing	<u> </u>	<u> </u>	<u> </u>		 	1	<u> </u>	<u> </u>	igwdown							Щ					1	auto mobile servicing
011709 other manufacturing		<u> </u>	1				<u> </u>														1	other manufacturing
030104 railway construction work																		<u> </u>		1	1	railway construction work
030203 building facility construction work							1														1	building facility construct work
030302 machinery/apparatus setting work																				1	1	machinery/apparatus setti work
040101 railroad service																			1		1	railroad service
050101 land cargo handling service							1														1	land cargo handling servi
050209 other harbor transportation service																			1		1	other harbor transportation service
070201 fishery								İ										1			1	fishery
080101 all kinds of wholesale						İ		Ï			1										1	all kinds of wholesale
080201 all kinds of retail										1											1	all kinds of retail
080401 warehousing			1																		1	warehousing
110101 telecommunication service																				1	1	telecommunication service
160101 public office							i —												1		1	public office
010101 meat/dairy products																						meat/dairy products
010102 fishery products							Ï															fishery products
010103 agricultural food products							i—															agricultural food products
010106 soft drinks							i —															soft drinks
010109 other foods							i —															other foods
010201 silk-reeling																						silk-reeling
010202 cotton-spinning							i —															cotton-spinning
010203 weaving																						weaving
010204 dyeing						Ï		i	H					m								dyeing
010209 other textile products		Ï	Ï				i															other textile products
010301 over/under wear																						over/under wear
010309 other fiber products																						other fiber products
other lumber and wood products																						other lumber and wood products
010501 wood furniture							Ĭ															wood furniture
010502 metal furniture																	=					metal furniture
010503 fittings														$\overline{}$								fittings
010509 other furniture							Ï		H													other furniture
010601 pulp/paper																						pulp/paper
010602 paper processing products		i	i			1	╫	i	H	\square	$\vdash \vdash$		$\vdash \vdash$	H								paper processing products
010609 products processing products																						other pulp/paper processi products
010701 printing service														\square								printing service
010702 bookbinding	 	1	1	-					$\vdash \vdash$	$\vdash\vdash$	$\vdash\vdash$			$\vdash\vdash$	\vdash	$\vdash\vdash$						bookbinding

010709 other printing and bookbinding							other printing and bookbinding
non organic or organic chemical products							non organic or organic chemical products
010802 chemical fiber							chemical fiber
010803 pharmaceuticals							pharmaceuticals
010804 petroleum/coal products				i			petroleum/coal products
010806 rubber products				imi			rubber products
010807 leather products				i			leather products
010808 painting products				imi			painting products
010809 chemical fertilizer products							chemical fertilizer produc
010899 other chemical products				imi			other chemical products
010902 glass products							glass products
010903 pottery products							pottery products
010904 fire resisting products							fire resisting products
010905 other ceramic products							other ceramic products
011001 steel/iron/rolling products							steel/iron/rolling products
011002 casting products				imi			casting products
011009 other steel products				imi			other steel products
011101 nonferrous metals/rolling products							nonferrous metals/rolling products
011102 nonferrous metals casting products							nonferrous metals casting products
O11109 other nonferrous metal products							other nonferrous metal products
011201 western tableware/cutting tool products							western tableware/cutting tool products
011202 screw products				imi			screw products
011203 metal press products				i			metal press products
011204 metal plating products				imi			metal plating products
011302 measuring instruments				i			measuring instruments
011303 optical instruments				imi			optical instruments
011304 watch products							watch products
O11305 other precision machine products							other precision machine products
011401 heavy electrical equipment							heavy electrical equipmen
011402 electrical appliance				أأأأ			electrical appliance
electronics equipment and telecommunications apparatus							electronics equipment and telecommunications apparatus
011409 other electrical equipment							other electrical equipmen
011501 ship building				i			ship building
011503 railway vehicle products				أأأأ			railway vehicle products
other transport equipment							other transport equipment

products															products
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
011703 cleaning				T											cleaning
011704 tobacco products				Ti	Ti	Ti								-	tobacco products
020101 general coal mining				Ti											general coal mining
020109 other coal mining				Ti		i								=	other coal mining
020201 quarrying	i			Ti	Ti	i									quarrying
020209 other quarrying	İ					Ti									other quarrying
020301 metal mining	i		Ti	Ti	Ti	i									metal mining
020302 petroleum mining	İ					Ti									petroleum mining
020309 other mining	İ		Ti	Ti	Ti	Ti								=	other mining
030103 subway construction work	İ					Ti									subway construction work
030111 port/seaside construction work															port/seaside construction work
040102 water transportation service				Ti			$\overline{}$					7	1		water transportation service
040103 airline service												$\exists \vdash$		==:	airline service
040201 taxi service				Ti											taxi service
040202 bus service				T	Ti	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				T											other transportation service
050201 general harbor transportation service															general harbor transportation service
050202 port cargo handling service															port cargo handling service
070101 livestock															livestock
070209 other fishery															other fishery
080102 furniture/fittings wholesale															furniture/fittings wholesale
080203 furniture/fittings retail															furniture/fittings retail
080205 newspaper retail															newspaper retail
080301 haircut															haircut
080302 beauty salon															beauty salon
090101 banking/trust business															banking/trust business
090102 stock/commodity trade business															stock/commodity trade business
090103 insurance business															insurance business
090109 other financial business															other financial business

000201	=		i		i		i	i	i	i		i	i		i	i	i	i	i	_	_		i	i	[[]
090201 traveling service							<u> </u>	<u> </u>			<u> </u>						<u> </u>	<u> </u>	<u> </u>					<u> </u>	traveling service
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
120101 auto mobile practical training																									auto mobile practical training
120102 software service																									software service
130101 hospital																									hospital
130102 general clinic																									general clinic
other medical treatment service																									other medical treatment service
social welfare facility																									social welfare facility
130301 bathhouse																									bathhouse
other health and hygiene service																									other health and hygiene service
140201 general restaurant																									general restaurant
140209 other restaurants																									other restaurants
140302 park and amusement park																									park and amusement park
150101 building maintenance service																									building maintenance service
150104 cremation service																									cremation service
150105 livestock process service																									livestock process service
other cleaning and livestock process service																									other cleaning and livestock process service
170101 dispatch service																									dispatch service
information processing service																									information processing service
total		48		41		33	31	19	37	43	20	23	17	22	25	28	18	34	25	30	23	24	20	561	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