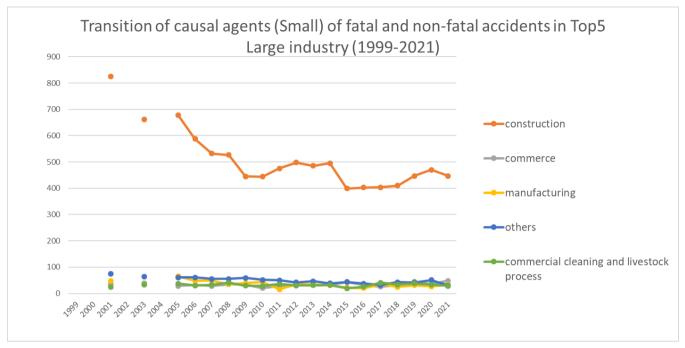
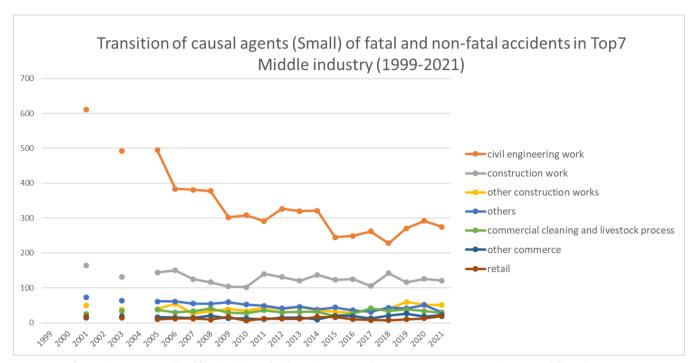
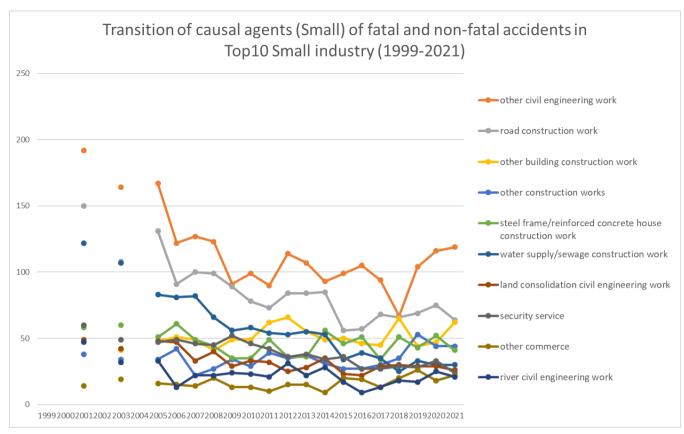
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Middle Industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Large industry (1999-2021)

Γ.		1000	2000	2001	2000	2002	2004	2005	2006	2007	2000	2000	2010	2011	2012	2012	2011	2015	2016	2017	2010	2010	2020	2024		
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	total	Large industry
03	construction			825		661		678	588	532	527	445	444	475	498	485	495	399	403	404	410	447	470	447	9,633	construction
08	commerce			36		39		28	32	28	35	34	20	29	30	31	33	43	32	26	32	44	36	48	636	commerce
01	manufacturing			48		34		65	48	49	35	39	43	16	35	34	31	22	20	35	25	31	27	33	670	manufacturing
17	others			75		64		61	61	55	55	59	52	50	42	46	38	44	37	32	43	42	51	30	937	others
15	commercial cleaning and			25		34		37	30	33	41	29	28	36	30	31	32	19	26	41	34	38	34	28	606	commercial cleaning and
	livestock process			23		J-7		<i></i>					20						20		J-1			20		livestock process
06	agriculture			19		21		20	17	13	14	17	11	18	18	18	12	17	14	10	10	18	15	26	308	agriculture
04	transportation service			34		29		20	21	14	18	17	20	25	18	14	23	10	17	15	20	9	14	15	353	transportation service
						$\overline{}$	$\overline{}$		$\overline{}$	$\overline{}$		$\overline{}$	$\overline{}$				$\overline{}$	$\overline{}$								

02	mining		36	20	20	15	18	13	15	17	9	15	15	15	14	9	9	11	12	10	12	285	mining
05	cargo handling service		5	3	1	4	2	4	1	3	6	4	2	4		2	2	3	4	3	5	58	cargo handling service
14	hotel/restaurant/amusement service		4	5	6	3	5	7	6	6	3	4	3	2	3	5	4	2	2	6	4	80	hotel/restaurant/amusement service
07	livestock/fishery		1		4	4	1		1	1	3	2		2	2	1	8	2	4	4	2	42	livestock/fishery
13	health and hygiene service				1		1				1		1	1				1	1			7	health and hygiene service
09	financial			1										1					1	1		4	financial
09	business/advertisement			<u> </u>																		4	business/advertisement
11	telecommunication service			1	1			1						1								4	telecommunication service
12	education/research service			1				1					1									3	education/research service
16	public office							1								1				1		3	public office
10	movie/play service						1															1	movie/play service
	total		1,108	913	942	823	752	752	663	645	671	696	681	690	573	567	586	593	653	672	650	13,630	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Middle industry (1999-2021)

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	total	Middle industry
0301	civil engineering work			611		493		495	384	381	378	302	308	291	327	320	321	245	249	262	228	271	292	275	6,433	civil engineering work
0302	construction work			164		131		144	150	125	116	104	102	140	131	120	137	123	125	105	142	116	126	121	2,422	construction work
0303	other construction works			50		37		39	54	26	33	39	34	44	40	45	37	31	29	37	40	60	52	51	778	other construction works
1702	others			73		64		61	61	55	54	59	52	49	41	46	38	44	36	31	43	41	51	30	929	others
1501	commercial cleaning and livestock process			25		34		37	30	33	41	29	28	36	30	31	32	19	26	41	34	38	34	28	606	commercial cleaning and livestock process
0804	other commerce			14		19		16	15	14	20	13	13	10	15	15	9	20	19	13	20	26	18	22	311	other commerce
0802	retail			17		14		10	12	12	9	17	6	12	11	11	17	16	10	8	7	10	13	19	231	retail
0403	road cargo transportation service			34		28		19	20	14	18	17	20	25	17	13	20	10	16	14	20	9	14	15	343	road cargo

																							transportation service
0602	forestry		15	19	11	13	10	11	10	9	14	9	13	7	8	12	5	7	10	9	14	206	forestry
0601	agriculture		4	2	9	4	3	3	7	2	4	9	5	5	9	2	5	3	8	6	12	102	agriculture
0202	quarrying		34	18	20	15	16	13	15	17	9	15	15	15	14	8	8	11	12	10	11	276	quarrying
0117	other manufacturing		16	6	27	15	13	15	16	10	5	12	10	14	11	10	14	5	7	8	10	224	other manufacturing
0109	sand and stone products		16	12	16	15	15	6	8	10	3	11	8	5	5	2	9	10	10	6	8	175	sand and stone products
0801	wholesale		5	6	2	5	2	6	4	1	7	4	5	7	7	3	5	5	8	5	7	94	wholesale
0112	metal products		6	4	7	4	6	5	2	4		2	6	2	2	3	4	3	3	2	4	69	metal products
0502	harbor transportation service		3	2		2	1	3	1	2	4	2	1	4		2	2	2	3	2	4	40	harbor transportatio
1403	other amusement service		4	3	5	2	5	6	4	5	2	3	2	1	2	4	4	1	2	4	3	62	other amusement service
0116	electric/gas/water service		2	1	1		1	1	1	1											3	11	electric/gas/water service
0701	livestock		1		3	4	1		1	1	3	2		2	2	1	7	2	4	4	2	40	livestock
0104	wood products		1	1	1		3			2	1	2	2	1			1	3	3	1	2	24	wood products
0115	transport equipment products			1	1	1	2	1	2	1	1	1	1			1			3	2	2	20	transport equipmen
0113	machine products		4	2	4	6	5	2	3	6	3	4	4	3	2	3	4	3	2	2	1	63	machine products
0110	steel making		1	2	4	2	2	3	4	5	1			1	1	1		1		2	1	31	steel making
0108	chemical products		1	5		2	1	2		1	1		2	5					1	3	1	25	chemical products
0501	land cargo handling service		2	1	1	2	1	1		1	2	2	1					1	1	1	1	18	land cargo handling
1401	hotel			2	1	1		1	1		1	1	1	1	1	1		1		2	1	16	hotel
0203	other mining		2	2			1									1	1				1	8	other mining
0101	food products		1		1	1											2		1		1	7	food products

0111	nonferrous metal making				1		1		2	2	1	2	1		1		1	1		13	nonferrous metal making
1701	dispatch service		2					1			1	1				1	1	1		<u> </u>	dispatch service
0402	road passenger transport service			1	1							1		1		1	1			6	road passenger transport service
0114	electrical equipment products				1	1			1										1	4	electrical equipment products
1101	telecommunication service			1	1			1						1						4	telecommunication service
0106	pulp/paper processing products				1	1				1										3	pulp/paper processing products
0902	advertisement and mediator			1										1					1	3	advertisement and mediator
1201	education/research service			1				1					1							3	education/research service
1302	social welfare facility										1		1	1						3	social welfare facility
1303	other health and hygiene service				1		1											1		3	other health and hygiene service
1601	public office							1								1			1	3	public office
0401	railroad/water transportation/airline service					1								1						2	railroad/water transportation/airline service
0404	other transportation service												1	1						2	other transportation service
0702	fishery				1												1			2	fishery
1402	restaurant								1	1										2	restaurant
0102	textile products											1								1	textile products
0201	coal mining						1													1	coal mining

0901	financial business																		1			1	financial business
1001	movie/play service						1															1	movie/play service
1301	medical treatment service																	1				1	medical treatment service
0103	fiber products																						fiber products
0105	furniture																						furniture
0107	printing/bookbinding																						printing/bookbinding
0803	haircut/beauty salon																						haircut/beauty salon
	total		1,108	913	942	823	752	752	663	645	671	696	681	690	573	567	586	593	653	672	650	13,630	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 142 excavating machine in Small industry (1999-2021)

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	total	Small industry
030199	other civil engineering work			192		164		167	122	127	123	91	99	90	114	107	93	99	105	94	67	104	116	119	2,193	other civil engineering work
030106	road construction work			150		108		131	91	100	99	89	78	73	84	84	85	56	57	68	66	69	75	64	1,627	road construction work
030209	other building construction work			59		41		48	51	49	41	49	49	62	66	55	49	50	46	45	65	44	47	62	978	other building construction work
030309	other construction works			38		34		34	42	22	27	34	29	39	35	37	31	27	27	30	35	53	44	44	662	other construction works
030201	steel frame/reinforced concrete house construction work			58		60		51	61	49	44	35	35	49	36	36	56	46	51	34	51	43	52	41	888	steel frame/reinforced concrete house construction work
030110	water supply/sewage construction work			122		107		83	81	82	66	56	58	54	53	55	53	34	39	35	25	33	30	30	1,096	water supply/sewage construction work
030109	land consolidation civil engineering work			49		42		48	47	33	40	29	33	32	25	28	35	23	22	29	30	29	29	26	629	land consolidation civil engineering work
170201	security service			60		49		47	49	46	45	52	46	42	36	38	34	36	27	27	29	28	33	24	748	security service
080409	other commerce			14		19		16	15	14	20	13	13	10	15	15	9	20	19	13	20	26	18	22	311	other commerce
030107	river civil engineering work			47		32		33	13	22	22	24	23	21	31	22	28	17	9	13	18	17	25	21	438	river civil engineering work

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150102	industrial waste management service	21	22	25	21	24	24	15	20	28	21	22	23	15	20	34	27	29	27	20	438	industrial waste management
030202	wooden house construction work	30	22	28	25	17	21	14	16	20	18	22	23	13	17	19	22	23	16	12	378	wooden house construction work
060101	agriculture	4	2	9	4	3	3	7	2	4	9	5	5	9	2	5	3	8	6	12	102	agriculture
080209	other retails	7	9	3	8	6	4	10	3	6	7	5	9	11	6	5	2	3	6	11	121	other retails
040301	general truck transportation service	27	21	14	18	12	14	16	18	22	16	10	18	10	15	10	15	8	11	10	285	general truck transportation service
060201	lumbering	12	10	6	9	7	8	9	6	8	4	8	4	4	6	3	4	8	7	10	133	lumbering
080204	fuel retail	8	3	6	3	6	4	4	3	5	4	5	6	4	4	3	5	6	7	7	93	fuel retail
020201	quarrying	24	9	13	10	9	9	12	13	1	12	10	10	10	4	6	8	8	8	6	182	quarrying
170209	others	13	15	14	12	9	9	7	6	7	5	8	4	8	9	4	14	13	18	6	181	others
030203	building facility construction	17	8	17	13	10	10	6	2	9	11	7	9	14	11	7	4	6	11	6	178	building facility construction work
080109	other wholesale	3	6	2	5	2	6	4	1	6	3	5	6	7	3	5	5	8	5	6	88	other wholesale
011702	machine repair	12	4	12	7	7	6	10	5	2	6	7	8	7	7	9	2	6	6	5	128	machine repair
150103	other waste disposal service	3	9	6	5	7	7	8	8	6	5	4	4	1	3	1	4	6	1	5	93	other waste disposal service
030301	electricity/telecommunication work	6	3	2	8	1	2	3	3	4	4	4	3	2		3	4	4	7	5	68	electricity/telecommunication work
030108	sand collapse prevention civil engineering work	22	14	15	15	6	8	3	5	10	6	10	12	5	2	3	7	8	8	4	163	sand collapse prevention civil
030105	bridge construction work	6	11	4	5	3	7	3	4	4	7	1	4	2	6	7	5	4	3	4	90	bridge construction work
060209	other forestry	3	9	5	4	3	3	1	3	6	5	5	3	4	6	2	3	2	2	4	73	other forestry
011209	other metal products	6	4	7	4	6	5	2	4		2	6	2	2	3	4	3	3	2	4	69	other metal products
050202	port cargo handling service	3	1		2	1	1		2	1		1	4		2		2	1	1	4	26	port cargo handling service
010909	other sand and stone products	6	8	4	6	4	3	5	4	2	6	2	2	1		5	5	2	2	3	70	other sand and stone

030111	port/seaside construction work		6	6	6	1	5	5	2	2	2	3	7	2	1	4	6	3	2		3	66	port/seaside construction work
011701	auto mobile servicing		3	1	11	8	4	2	5	4	1	2	1	3	3	2	3	3		2	3	61	auto mobile servicing
020209	other quarrying		3	1	2	3	3	2	1	2	1		2	1	2	2		1		1	3	30	other quarrying
010905	other ceramic products		2	1	1	1	1	1										1			3	11	other ceramic products
010901	cement products		8	3	11	8	9	2	3	6	1	5	6	3	4	2	4	4	8	4	2	93	cement products
030102	tunnel construction work		12	4	6	5	1	6	2		3	3	5	4	6		2	5	3	1	2	70	tunnel construction work
020202	gravel digging		7	8	5	2	4	2	2	2	7	3	3	4	2	2	2	2	4	1	2	64	gravel digging
150109	other cleaning and livestock process service			3	3	4	1	9	5		1	3	5	5	2	3	5	2	3	4	2	60	other cleaning and livestock process service
140301	golf course		2	3	5	2	4	4	4	5	2	3	2	1	2	3	1		2	2	2	49	golf course
030302	machinery/apparatus setting work		6		3	4	3	4	2	2	1	1	4	3	2	2	4	1	3	1	2	48	machinery/apparatus setting work
070101	livestock		1		3	4	1		1	1	3	2		2	2	1	7	2	4	4	2	40	livestock
030104	railway construction work		2	2	1	4	1	1		2	1	1	1	3	2	2	4	2	2	3	2	36	railway construction work
011709	other manufacturing		1	1	4		2	7	1	1	2	4	2	3	1	1	2		1		2	35	other manufacturing
040309	other land cargo transportation service		3	6	2		1	3	1			1	1	1		1	2	5	1		2	30	other land cargo transportation service
040302	specific truck transportation service		4		3	2	1	1		2	3		2	1			2			3	2	26	specific truck transportation service
011602	city gas service		1	1					1	1											2	6	city gas service
011301	machine products		4	2	4	6	4	2	3	5	3	3	4	3	2	3	4	3	2	2	1	60	machine products
011009	other steel products			1	2	2	1	1	3	3				1	1			1		1	1	18	other steel products
050101	land cargo handling service		2	1	1	2	1	1		1	2	2	1					1	1	1	1	18	land cargo handling service
140101	hotel			2	1	1		1	1		1	1	1	1	1	1		1		2	1	16	hotel
150101	building maintenance service		1		3		1	1	1		1	1			1		1	1		2	1	15	building maintenance service
010401	lumbering			1			2			1		2	2					1	1	1	1	12	lumbering

010804	petroleum/coal products			2		1				1				4						3	1	12	petroleum/coal products
011509	other transport equipment products						1		1		1		1			1			1	2	1	9	other transport equipment products
020309	other mining		2	2			1									1	1				1	8	other mining
080201	all kinds of retail		1	1		1			2		1		1								1	8	all kinds of retail
140309	other amusement service		2				1	1										1		2	1	8	other amusement service
010109	other foods					1											2		1		1	5	other foods
011501	ship building						1			1		1							1		1	5	ship building
011603	city water service		1				1	1													1	4	city water service
010402	plywood										1										1	2	plywood
040303	cargo/ light automobile transportation service			1																	1	2	cargo/ light automobile transportation service
080102	furniture/fittings wholesale		1																		1	2	furniture/fittings wholesale
030101	hydroelectric plant construction work		2	2	1			1	3	2	1			2		2	1					17	hydroelectric plant construction work
011001	steel/iron/rolling products			1	2		1	2	1	2	1					1				1		12	steel/iron/rolling products
050201	general harbor transportation service			1				2	1		3	1					2		1	1		12	general harbor transportation service
010409	other lumber and wood products		1		1		1			1				1			1	2	2			10	other lumber and wood products
011101	nonferrous metals/rolling products				1		1		2	2	1	1	1				1					10	nonferrous metals/rolling products
030103	subway construction work		1	1			1			2						1				2		8	subway construction work
170101	dispatch service		2					1			1	1				1	1		1			8	dispatch service
010899	other chemical products		1	1		1	1	1			1											6	other chemical products
011502	auto mobile products			1	1	1		1	1										1			6	auto mobile products
080202	auto mobile retail							1	1					2	1							5	auto mobile retail

140302	park and amusement park							1								1	3			5	park and amusement park
080101	all kinds of wholesale		1								1	1		1						4	all kinds of wholesale
110101	telecommunication service			1	1			1						1						4	telecommunication service
010806	rubber products							1					2							3	rubber products
011305	other precision machine products						1			1		1								3	other precision machine products
040201	taxi service			1												1	1			3	taxi service
080203	furniture/fittings retail		1		1													1		3	furniture/fittings retail
090209	other advertisement and mediator			1										1					1	3	other advertisement and mediator
120109	other education/research service			1				1					1							3	other education/research service
130201	social welfare facility										1		1	1						3	social welfare facility
130309	other health and hygiene service				1		1											1		3	other health and hygiene service
160101	public office							1								1			1	3	public office
010609	other pulp/paper processing products				1	1														2	other pulp/paper processing products
010801	non organic or organic chemical products			1														1		2	non organic or organic chemical products
011109	other nonferrous metal products											1			1					2	other nonferrous metal products
011409	other electrical equipment					1			1											2	other electrical equipment
040202	bus service											1		1						2	bus service
040409	other transportation service												1	1						2	other transportation service
050209	other harbor transportation service											1						1		2	other harbor transportation service
140201	general restaurant								1	1										2	general restaurant

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010103	agricultural food products						1													1	agricultural food products
010105	alcoholic drinks			1																1	alcoholic drinks
010209	other textile products												1							1	other textile products
010601	pulp/paper											1								1	pulp/paper
010805	plastics products					1														1	plastics products
010809	chemical fertilizer products													1						1	chemical fertilizer produc
010902	glass products								1											1	glass products
011002	casting products			1																1	casting products
011102	nonferrous metals casting products																	1		1	nonferrous metals casting
011402	electrical appliance																		1	1	electrical appliance
011403	electronics equipment and telecommunications apparatus						1													1	electronics equipment an telecommunications apparatus
011601	electric utility service						1													1	electric utility service
020109	other coal mining								1											1	other coal mining
040101	railroad service							1												1	railroad service
040102	water transportation service													1						1	water transportation serv
040209	other passenger transport service						1													1	other passenger transpor
070201	fishery						1													1	fishery
070209	other fishery															1				1	other fishery
080205	newspaper retail					1														1	newspaper retail
090103	insurance business																	1		1	insurance business
100109	other movie/play service								1											1	other movie/play service
130109	other medical treatment service																1			1	other medical treatment service

010101	meat/dairy products												meat/dairy products
010102	fishery products												fishery products
010104	bread/cake products												bread/cake products
010106	soft drinks												soft drinks
010201	silk-reeling				ĺ								silk-reeling
010202	cotton-spinning												cotton-spinning
010203	weaving												weaving
010204	dyeing												dyeing
010301	over/under wear												over/under wear
010309	other fiber products												other fiber products
010501	wood furniture												wood furniture
010502	metal furniture												metal furniture
010503	fittings												fittings
010509	other furniture												other furniture
010602	paper processing products												paper processing products
010701	printing service												printing service
010702	bookbinding												bookbinding
010709	other printing and												other printing and
010703	bookbinding												bookbinding
010802	chemical fiber												chemical fiber
010803	pharmaceuticals												pharmaceuticals
010807	leather products												leather products
010808	painting products												painting products
010903	pottery products												pottery products
010904	fire resisting products												fire resisting products
011201	western tableware/cutting												western tableware/cutting

	tool products													tool products
011202	screw products													screw products
011203	metal press products													metal press products
011204	metal plating products													metal plating products
011302	measuring instruments													measuring instruments
011303	optical instruments													optical instruments
011304	watch products													watch products
011401	heavy electrical equipment													heavy electrical equipment
011503	railway vehicle products													railway vehicle products
011609	other electric/gas/water service													other electric/gas/water
011703	cleaning													cleaning
011704	tobacco products													tobacco products
020101	general coal mining													general coal mining
020301	metal mining													metal mining
020302	petroleum mining													petroleum mining
040103	airline service													airline service
080301	haircut													haircut
080302	beauty salon													beauty salon
080401	warehousing													warehousing
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
100101	movie production and delivery service													movie production and delivery service

100102	movie theatre																						movie theatre
120101	auto mobile practical training																						auto mobile practical training
120102	software service																						software service
130101	hospital																						hospital
130102	general clinic																						general clinic
130301	bathhouse																						bathhouse
140209	other restaurants																						other restaurants
150104	cremation service																						cremation service
150105	livestock process service																						livestock process service
170202	information processing																						information processing
	service																						service
	total		1,108	913	942	823	752	752	663	645	671	696	681	690	573	567	586	593	653	672	650	13,630	total

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

https://www.jisha.or.jp/english/statistics/202212\_03.html