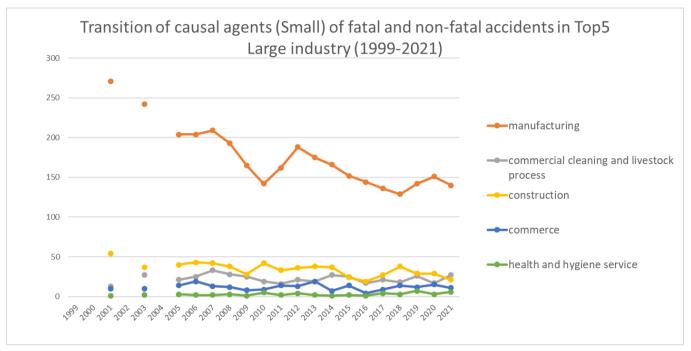
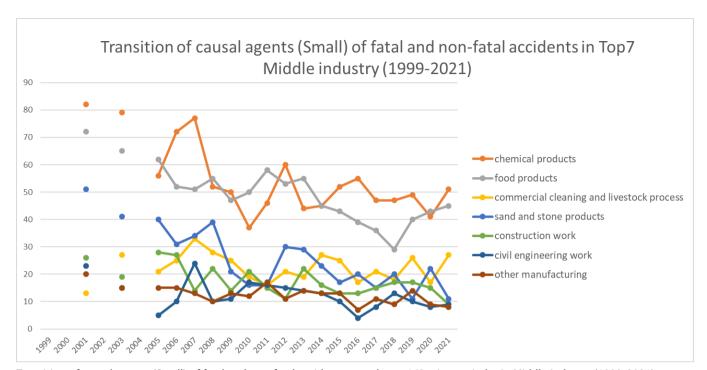
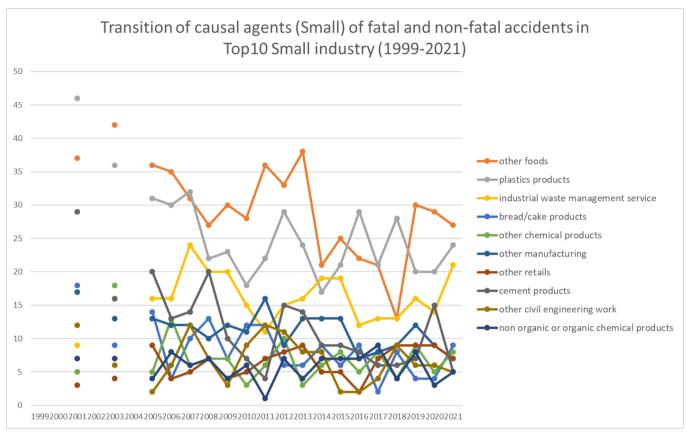
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder in Middle Industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder in Large industry (1999-2021)

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
01	manufacturing			271		242		204	204	209	193	165	142	162	188	175	166	152	144	136	129	142	151	140	3,315	manufacturing
15	commercial cleaning and livestock process			13		27		21	25	33	28	25	19	16	21	19	27	25	17	21	18	26	17	27	425	commercial cleaning and livestock process
03	construction			54		37		40	43	42	38	28	42	33	36	38	37	24	19	27	38	29	29	21	655	construction
08	commerce			10		10		14	19	13	12	8	9	14	13	19	7	14	4	9	14	12	15	11	227	commerce
13	health and hygiene service			1		2		3	2	2	3	1	5	2	4	2	1	2	1	4	3	7	3	6	54	health and hygiene service
06	agriculture			1		4			2	4	4	6	3	7	4	2	2	4	1	2	3	7	4	5	65	agriculture
07	livestock/fishery			7		11		5	5	6	4	6	8	3	2	6	5	8	1	5	3	6	6	4	101	livestock/fishery

14	hotel/restaurant/amusement service		5	2	4	7	5	3	5	3	4	8	8	5	11	4	3	4	6	3	4	94	hotel/restaurant/amusement service
17	others		5	3	5	3	3	5	4	5	2	3	2	2	3	3	4	2	1	2	3	60	others
02	mining		18	11	10	10	12	5	9	4	3	5	8	2	5	5	7	2	4	5	2	127	mining
04	transportation service		1	5	1	3	1	3		3	1		2	1	1		2	6	2	2	1	35	transportation service
12	education/research service		2		4	1			4		1			1		1			1	1	1	17	education/research service
05	cargo handling service		1	1	1		1	2	1				1		1			1				10	cargo handling service
16	public office			1													1	1				3	public office
09	financial business/advertisement															1						1	financial business/advertisement
11	telecommunication service				1																	1	telecommunication service
10	movie/play service																						movie/play service
	total		389	356	313	324	331	300	262	243	248	284	282	256	250	201	221	224	243	238	225	5,190	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder 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
0108	chemical products			82		79		56	72	77	52	50	37	46	60	44	45	52	55	47	47	49	41	51	1,042	chemical products
0101	food products			72		65		62	52	51	55	47	50	58	53	55	45	43	39	36	29	40	43	45	940	food products
1501	commercial cleaning and livestock process			13		27		21	25	33	28	25	19	16	21	19	27	25	17	21	18	26	17	27	425	commercial cleaning and livestock process
0109	sand and stone products			51		41		40	31	34	39	21	16	16	30	29	23	17	20	15	20	11	22	11	487	sand and stone products
0302	construction work			26		19		28	27	14	22	14	21	15	11	22	16	13	13	15	17	17	15	9	334	construction work
0301	civil engineering work			23		15		5	10	24	10	11	17	16	15	14	13	10	4	8	13	10	8	9	235	civil engineering work
0117	other manufacturing			20		15		15	15	13	10	13	12	17	11	14	13	13	7	11	9	14	9	8	239	other manufacturing
0802	retail			4		6		9	5	8	7	4	5	7	8	11	5	5	2	7	9	10	9	7	128	retail

0110	steel making	11	10	12	2	7	7	6	8	6	7	3	11	7	3	6	5	6	5	6	128	steel making
0113	machine products	5	4	2	1	4	4	6	4	4	2	8	5	1	2	1	2	3	7	5	70	machine products
1302	social welfare facility	1		1	1		2	1	5	2	2	2		2	1	4	3	5	3	5	40	social welfare facility
0801	wholesale	3	4	2	10	4	5	3	3	6	5	6	1	8	2	2	5	2	6	4	81	wholesale
0701	livestock	6	8	4	2	3	3	5	6	3	2	4	4	6		4	3	3	3	4	73	livestock
0601	agriculture	1	3		1	4	4	6	3	7	4	2	2	4		2	3	7	4	4	61	agriculture
0106	pulp/paper processing products	8	6	1	4	1	4	2		1	4	5	3	1	1	2	2	3	2	4	54	pulp/paper processing products
0303	other construction works	5	3	7	6	4	6	3	4	2	10	2	8	1	2	4	8	2	6	3	86	other construction works
1402	restaurant	4	2	4	6	5	2	5	2	3	5	7	3	9	3	2	3	5	3	3	76	restaurant
0115	transport equipment products	5	2	2	3	3	3	3	3	4	4	2	2	3	6	6	2	1	2	3	59	transport equipment products
1702	others	5	3	5	3	3	5	4	4	2	3	2	2	3	3	4	2	1	2	3	59	others
0114	electrical equipment products	3	5	4	5	3	2	2		2	2	3	4	1	3	3	1	2	4	3	52	electrical equipment products
0202	quarrying	17	10	9	10	12	4	9	4	3	4	8	2	5	4	7	2	4	5	2	121	quarrying
0112	metal products	3	3	3	4	1	6	7	4	5	5	6	5	5	3		8	5	3	1	77	metal products
0111	nonferrous metal making	6	3	1	5	6	5	2	3	1	2	4	4	3	2	5	2	4	7	1	66	nonferrous metal
0104	wood products	1	5	4	6	7	3	2	4	1	2	1	4	3	2	3	1	2	4	1	56	wood products
0403	road cargo transportation service	1	5	1	3	1	3		2	1		2		1		2	6	2	2	1	33	road cargo transportation service
1201	education/research service	2		4	1			4		1			1		1			1	1	1	17	education/research
1301	medical treatment service		2	2	1	2	1				1		1					2		1	13	medical treatment service

0107	printing/bookbinding		1	1	1				1			2								1	1	8	printing/bookbinding
1403	other amusement service		1							1		1		1	2						1	7	other amusement service
0602	forestry			1		1										1					1	4	forestry
0702	fishery		1	3	1	3	3	1	1	2			2	1	2	1	1		3	3		28	fishery
0102	textile products		2	2	1	1	1		1	1	1	2	1		3	1	1	1	1			20	textile products
0804	other commerce		3		3	4	1		1	1	1		2	1	1							18	other commerce
1401	hotel					1		1			1	2	1	1		1	1	1	1			11	hotel
0103	fiber products			1			1	3				1		2								8	fiber products
0501	land cargo handling service		1	1	1			2	1				1		1							8	land cargo handling service
0203	other mining		1	1	1			1				1				1						6	other mining
0105	furniture					2			1										1	1		5	furniture
0116	electric/gas/water service		1			1			1			1										4	electric/gas/water service
1601	public office			1													1	1				3	public office
0401	railroad/water transportation/airline service									1				1								2	railroad/water transportation/airline service
0502	harbor transportation service						1											1				2	harbor transportation service
0901	financial business															1						1	financial business
1101	telecommunication service				1																	1	telecommunication service
1303	other health and hygiene service											1										1	other health and hygiene service
1701	dispatch service									1												1	dispatch service

0201	coal mining																						coal mining
0402	road passonger transport somilies																						road passenger
0402	road passenger transport service																						transport service
0404	other transportation service																						other transportation
0404	other transportation service																						service
0803	haircut/beauty salon																						haircut/beauty salon
0003	advertisement and mediator																						advertisement and
0902	advertisement and mediator																						mediator
1001	movie/play service																						movie/play service
	total		389	356	313	324	331	300	262	243	248	284	282	256	250	201	221	224	243	238	225	5,190	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 162 mixer, grinder in Small industry (1999-2021)

code	Small industry	1999	2000	2001	2002	2003 200	200)5 2	2006 20	07	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Small industry
010109	other foods			37		42	36	3	35 31		27	30	28	36	33	38	21	25	22	21	13	30	29	27	561	other foods
010805	plastics products			46		36	31	3	30 32	2	22	23	18	22	29	24	17	21	29	21	28	20	20	24	493	plastics products
150102	industrial waste management service			9		16	16	1	16 24	. 2	20	20	15	11	15	16	19	19	12	13	13	16	14	21	305	industrial waste management service
010104	bread/cake products			18		9	14	4	10	1	13	7	12	12	6	6	9	6	9	2	8	4	4	9	162	bread/cake products
010899	other chemical products			5		18	5	1	13 6	7	7	7	3	6	10	3	6	8	5	8	4	9	5	8	136	other chemical products
011709	other manufacturing			17		13	13	1	12	. 1	10	12	11	16	9	13	13	13	7	8	9	12	9	7	216	other manufacturing
080209	other retails			3		4	9	4	1 5	7	7	4	5	7	8	9	5	5	2	7	9	9	9	7	118	other retails
010901	cement products			29		16	20	1	13 14	. 2	20	10	7	4	15	14	9	9	8	6	6	7	15	5	227	cement products
030199	other civil engineering work			12		6	2	6	5 12	: 7	7	3	9	12	11	8	8	2	2	4	9	6	6	5	130	other civil engineering work
010801	non organic or organic chemical products			7		7	4	8	8 6	7	7	4	6	1	7	4	7	7	7	9	4	8	3	5	111	non organic or organic chemical products
010806	rubber products			8		8	7	1	11 8	5	5	5	2	3	7	3	5	8	4	2	2	5	7	5	105	rubber products

130201	social welfare facility	1	1			1	1		2	1	5	2	2	2		2	1	4	3	5	3	5	40	social welfare facility
010909	other sand and stone products	1	13	1	10	9	6	16	12	7	6	12	11	12	10	8	9	6	8	3	4	4	166	other sand and stone products
030209	other building construction work	1	11	9	9	12	11	4	4	9	12	9	5	8	5	1	7	5	8	2	9	4	135	other building construction work
030201	steel frame/reinforced concrete house construction work	1	10	5	5	6	4	6	10	3	6	3	5	11	5	6	1	5	5	9	6	4	110	steel frame/reinforced concrete house construction work
010803	pharmaceuticals	8	3	4	4	1	1	15	4	3	3	7	4	7	4	2	4	3	5	4	5	4	88	pharmaceuticals
080109	other wholesale	3	3	4	4	2	10	4	5	3	3	6	5	6	1	8	2	2	4	2	6	4	80	other wholesale
070101	livestock	6	5	8	8	4	2	3	3	5	6	3	2	4	4	6		4	3	3	3	4	73	livestock
010102	fishery products	3	3	2	2	1	3	8	8	5	3	2	6	6	6	3	4	5	1	2		4	72	fishery products
060101	agriculture	1	1	3	3		1	4	4	6	3	7	4	2	2	4		2	3	7	4	4	61	agriculture
011301	machine products	5	5	4	4	1	1	3	4	4	4	3	2	6	5	1	2	1	1	3	6	4	60	machine products
010602	paper processing products	2	2	2	2		1		2	2			1	2			1	1	2	3	2	4	25	paper processing products
011002	casting products	1	10	7	7	10		2	5	5	8	6	5	2	10	7	3	4	4	3	4	3	98	casting products
140201	general restaurant	4	4	2	2	4	5	3	2	5	2	3	5	6	2	8	3	2	3	5	3	3	70	general restaurant
170209	others	5	5	3	3	5	3	2	5	4	4	2	3	2	2	3	3	4	2	1	2	3	58	others
011502	auto mobile products	5	5	2	2	2	2	3	2	2	2	2	3	2		2	5	5	2	1	1	3	46	auto mobile products
010808	painting products	4	4	6	5	2	3	3	2	4	1				1	3	2	1	3	2	1	3	41	painting products
150109	other cleaning and livestock process service			2	2		4	3	2	1	2	4	2		4	2			1	2		3	32	other cleaning and livestock process service
010105	alcoholic drinks	3	3	1	1	3	3	1	1			1	1		2	1	1		1	2	1	3	25	alcoholic drinks
150103	other waste disposal service	2	2	8	8	4	5	5	6	3	1		3	2	2	3	5	4	4	7	2	2	68	other waste disposal service
	electronics equipment and																							electronics equipment and
	telecommunications apparatus	1	1	3	3	2		3	1			1	2	1	2			1		1	1	2	21	telecommunications apparatus

011009	other steel products					1	3	2				1	1				2			1	2	13	other steel products
020201	quarrying		12	6	6	5	6	3	5	2	2	3	7	1	3	4	7	1	1	4	1	79	quarrying
011209	other metal products		3	2	3	3	1	6	6	4	4	5	6	5	5	3		6	5	2	1	70	other metal products
010101	meat/dairy products		7	2	4	4	1	2	3	3	2	2	4	7	5		5	4	2	6	1	64	meat/dairy products
030202	wooden house construction work		3	4	9	9	3	6	1	1	3	1	1	4	3	5	2	3	5		1	64	wooden house construction work
030309	other construction works		2	2	7	6	3	4	2	3	1	5	2	4	1	1	4	7	2	6	1	63	other construction works
010103	agricultural food products		4	8	4	2		4	1	4	3	5	1		3	3	3			3	1	49	agricultural food products
010809	chemical fertilizer products				2	3	5	4	3	3	1	2	2	2	2	3	1		1		1	35	chemical fertilizer products
020202	gravel digging		4	4	2	4	3		3	2	1	1		1	2			1	3	1	1	33	gravel digging
010409	other lumber and wood products		1	1	1	4	4	2	1	3		1	1	2	2			1	2	3	1	30	other lumber and wood products
030109	land consolidation civil engineering work			3		2	4		4	1	1	3	3	1	2		1	1	3		1	30	land consolidation civil engineering work
011102	nonferrous metals casting products		3	1		3	2	2		1		2	2	3	2		2	1	1	2	1	28	nonferrous metals casting products
011409	other electrical equipment		2	1	2	3		1	2		1		2	2	1	2	2	1	1	3	1	27	other electrical equipment
010905	other ceramic products		3	8		2		3				2				1	1	3	1	1	1	26	other ceramic products
150101	building maintenance service		2	1			1		1	1	1	1	1	2	1		4		1	1	1	19	building maintenance service
011001	steel/iron/rolling products		1	3	2	1	2		1			1		1				1	3		1	17	steel/iron/rolling products
030302	machinery/apparatus setting work		3				1	2			1	4		4				1			1	17	machinery/apparatus setting work
120109	other education/research service		1		4	1			4		1			1		1			1	1	1	16	other education/research service
010902	glass products		2	1	2	1				1		1	1	1		1	1			1	1	14	glass products
130101	hospital			2	2	1	2					1		1					2		1	12	hospital
030110	water supply/sewage		2	1			1							1	3			1			1	10	water supply/sewage

	construction work																						construction work
011305	other precision machine products				1		1		1		1		2					1			1	8	other precision machine products
030301	electricity/telecommunication work			1					1	1		1				1					1	6	electricity/telecommunication work
010807	leather products					1					1			1			1				1	5	leather products
011701	auto mobile servicing		2																2		1	5	auto mobile servicing
030105	bridge construction work						1									2					1	4	bridge construction work
140309	other amusement service											1		1	1						1	4	other amusement service
010701	printing service		1						1												1	3	printing service
030111	port/seaside construction work							1												1	1	3	port/seaside construction work
060201	lumbering					1										1					1	3	lumbering
040309	other land cargo transportation service			1																	1	2	other land cargo transportation service
030106	road construction work		6	3	2	1	1	1	3	4	3		3	3	3		2	2	1			38	road construction work
010903	pottery products		3	2	6	7	4	2	2	1		1		1		1		3				33	pottery products
040301	general truck transportation service		1	3	1	2	1	3		2	1		1		1		2	6	2	2		28	general truck transportation service
030203	building facility construction work		2	1	1	3	1	2	1	2			2	2	3		3	1	1			25	building facility construction work
010804	petroleum/coal products		3		3	2		1	1	1	4	1	1	2	1		1	1				22	petroleum/coal products
010904	fire resisting products		1	4	3	2		2	2	1			2	2			1			1		21	fire resisting products
070209	other fishery		1	1	1	2	2	1	1	1			2		1	1	1		2	3		20	other fishery
011101	nonferrous metals/rolling products		1		1	2	2	1	2	1			1	1		1		1	2	3		19	nonferrous metals/rolling products
011109	other nonferrous metal		2	2			2	2		1	1		1		1	1	3		1	2		19	other nonferrous metal

	products																					products
010401	lumbering			3	2	2	1	1	1		1			2	1	1	2				17	lumbering
010601	pulp/paper		3	1	1	3	1	2				2		3							16	pulp/paper
011702	machine repair			2	2	2	1		1	1	1	2	1				2				15	machine repair
010209	other textile products			2	1	1	1		1	1	1	1	1		1	1		1			13	other textile products
010609	other pulp/paper processing products		3	3							1	1	3		1		1				13	other pulp/paper processing products
080409	other commerce		2		2	2	1		1	1	1		1	1	1						13	other commerce
030102	tunnel construction work		3		1		4	1		1		1					1				12	tunnel construction work
140101	hotel					1		1			1	2	1	1		1	1	1	1		11	hotel
010402	plywood			1	1		2			1		1				1	1			1	9	plywood
020209	other quarrying		1		1	1	3	1	1				1								9	other quarrying
080201	all kinds of retail		1	2		1	3						1						1		9	all kinds of retail
050101	land cargo handling service		1	1	1			2	1				1		1						8	land cargo handling service
070201	fishery			2		1	1			1				1	1				1		8	fishery
010106	soft drinks			1		1			1		2							2			7	soft drinks
010309	other fiber products						1	3				1		2							7	other fiber products
011509	other transport equipment products							1		1	2			1	1		1				7	other transport equipment products
010802	chemical fiber		1		1		2				1					1					6	chemical fiber
011501	ship building					1			1			1		1		1				1	6	ship building
140209	other restaurants					1	2						1	1	1						6	other restaurants
010709	other printing and bookbinding			1	1							2								1	5	other printing and
020309	other mining		1	1	1			1								1					5	other mining
080401	warehousing		1		1	2							1								5	warehousing
030107	river civil engineering work					1	1		1											1	4	river civil engineering work

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010203	weaving		1									1				1				3	weaving
010204	dyeing		1											2						3	dyeing
011202	screw products				1												1		1	3	screw products
030108	sand collapse prevention civil				1					2										3	sand collapse prevention civil
040302	specific truck transportation service				1		1						1							3	specific truck transportation service
160101	public office				1											1	1			3	public office
010501	wood furniture						2													2	wood furniture
010509	other furniture																	1	1	2	other furniture
011203	metal press products								1								1			2	metal press products
011204	metal plating products						1				1									2	metal plating products
011401	heavy electrical equipment						1								1					2	heavy electrical equipment
011402	electrical appliance				1		1													2	electrical appliance
011609	other electric/gas/water service		1									1								2	other electric/gas/water service
011704	tobacco products		1				1													2	tobacco products
140301	golf course		1											1						2	golf course
010202	cotton-spinning																	1		1	cotton-spinning
010301	over/under wear				1															1	over/under wear
010502	metal furniture								1											1	metal furniture
011302	measuring instruments																		1	1	measuring instruments
011304	watch products								1											1	watch products
011601	electric utility service								1											1	electric utility service
011603	city water service						1													1	city water service
011703	cleaning															1				1	cleaning

020301	metal mining								1						1	metal mining
030104	railway construction work			1											1	railway construction work
040101	railroad service							1							1	railroad service
040102	water transportation service										1				1	water transportation service
050201	general harbor transportation					1									1	general harbor transportation
030201	service					<u> </u>										service
050202	port cargo handling service												1		1	port cargo handling service
060209	other forestry			1											1	other forestry
080101	all kinds of wholesale												1		1	all kinds of wholesale
080204	fuel retail									1					1	fuel retail
090101	banking/trust business											1			1	banking/trust business
110101	telecommunication service				1										1	telecommunication service
120102	software service		1												1	software service
130109	other medical treatment						1								1	other medical treatment
130109	service						•									service
130301	bathhouse								1						1	bathhouse
140302	park and amusement park							1							1	park and amusement park
150105	livestock process service				1										1	livestock process service
170101	dispatch service							1							1	dispatch service
170202	information processing					1									1	information processing
170202	service					<u> </u>										service
010201	silk-reeling															silk-reeling
010503	fittings															fittings
010702	bookbinding															bookbinding
011201	western tableware/cutting															western tableware/cutting
011201	tool products															tool products
011303	optical instruments															optical instruments

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011503	railway vehicle products												railway vehicle products
011602	city gas service												city gas service
020101	general coal mining												general coal mining
020109	other coal mining												other coal mining
020302	petroleum mining												petroleum mining
030101	hydroelectric plant construction work												hydroelectric plant construction work
030103	subway construction work												subway construction work
040103	airline service												airline service
040201	taxi service												taxi service
040202	bus service												bus service
040209	other passenger transport service												other passenger transport
040303	cargo/ light automobile transportation service												cargo/ light automobile transportation service
040409	other transportation service												other transportation service
050209	other harbor transportation service												other harbor transportation service
080102	furniture/fittings wholesale												furniture/fittings wholesale
080202	auto mobile retail												auto mobile retail
080203	furniture/fittings retail												furniture/fittings retail
080205	newspaper retail												newspaper retail
080301	haircut												haircut
080302	beauty salon												beauty salon
090102	stock/commodity trade business												stock/commodity trade business
090103	insurance business												insurance business

090109	other financial business																						other financial business
090201	traveling service																						traveling service
090209	other advertisement and mediator																						other advertisement and mediator
100101	movie production and delivery service																						movie production and delivery service
100102	movie theatre																						movie theatre
100109	other movie/play service																						other movie/play service
120101	auto mobile practical training																						auto mobile practical training
130102	general clinic																						general clinic
130309	other health and hygiene service																						other health and hygiene service
150104	cremation service																						cremation service
170201	security service																						security service
	total		389	356	313	324	331	300	262	243	248	284	282	256	250	201	221	224	243	238	225	5,190	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