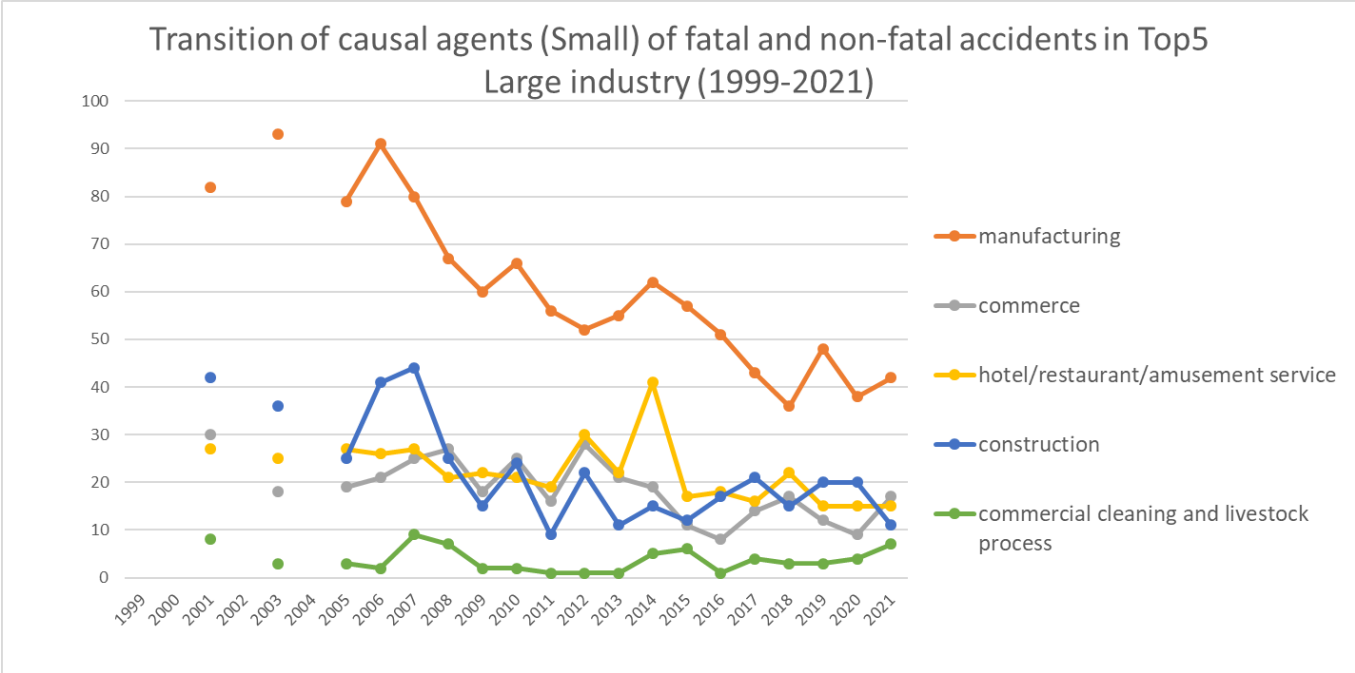
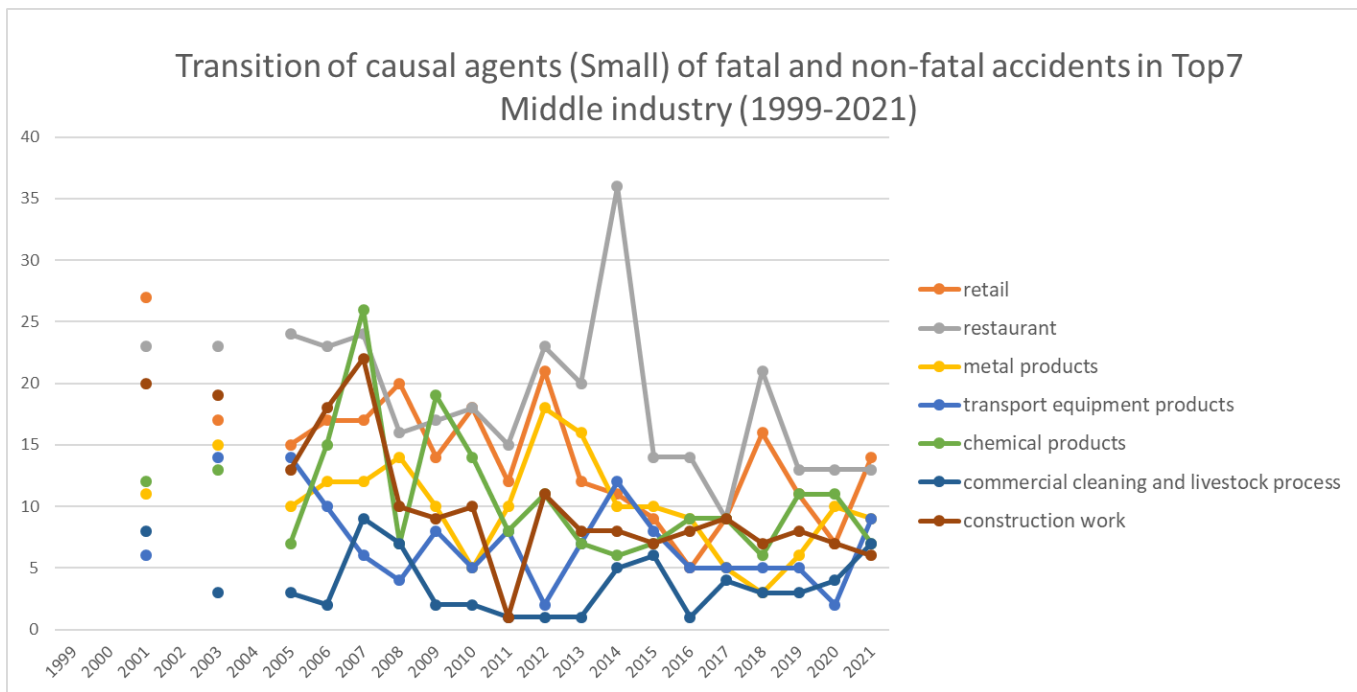


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance (1999-2021)

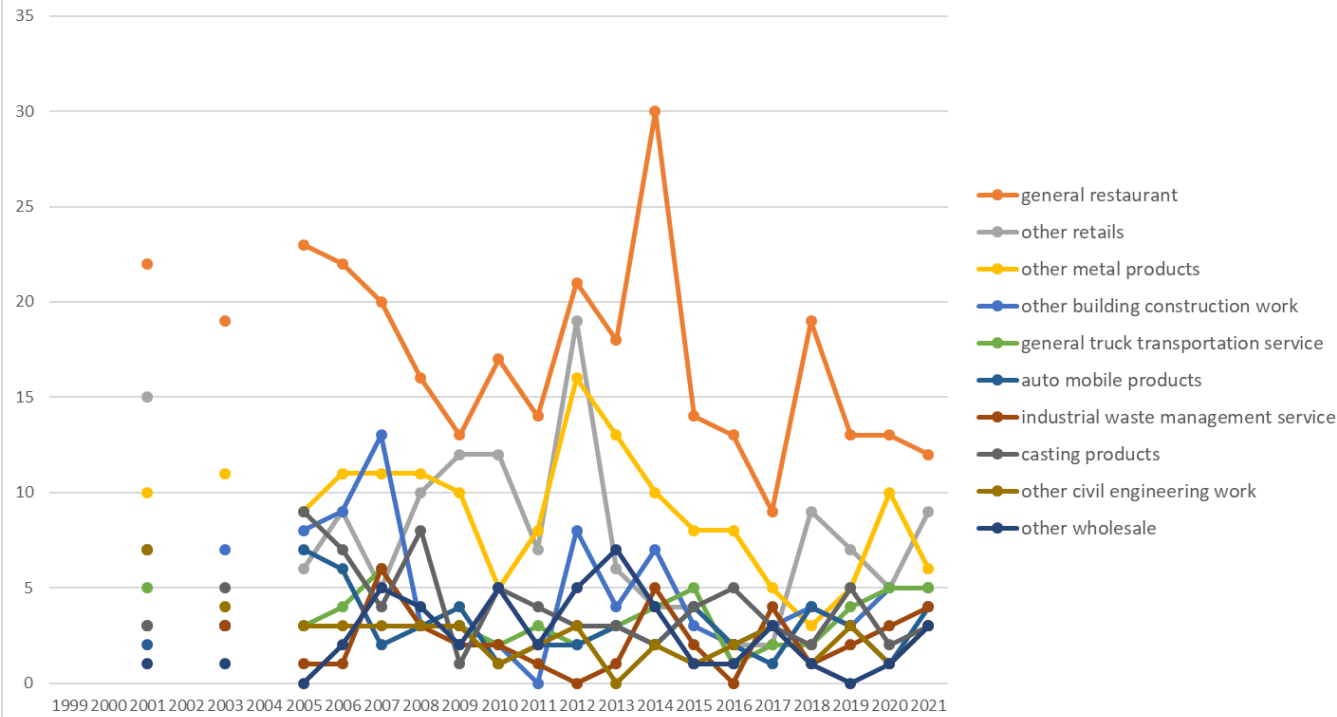


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance in Middle Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents in
Top10 Small industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance 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			82		93		79	91	80	67	60	66	56	52	55	62	57	51	43	36	48	38	42	1,158	manufacturing
08	commerce			30		18		19	21	25	27	18	25	16	28	21	19	11	8	14	17	12	9	17	355	commerce
14	hotel/restaurant/amusement service			27		25		27	26	27	21	22	21	19	30	22	41	17	18	16	22	15	15	15	426	hotel/restaurant/amusement service
03	construction			42		36		25	41	44	25	15	24	9	22	11	15	12	17	21	15	20	20	11	425	construction
15	commercial cleaning and livestock process			8		3		3	2	9	7	2	2	1	1	1	5	6	1	4	3	3	4	7	72	commercial cleaning and livestock process
13	health and hygiene service					1		1	2	2	3	1	2	1	3	2	1	1	1	2	3	2	1	6	35	health and hygiene service

04	transportation service			7		7		5	4	8	4	3	3	5	2	5	5	5	2	3	3	7	5	5	88	transportation service
17	others			6		2		3	6	2	2	3	7	1	4	2	1	1		4	5	3	3	2	57	others
06	agriculture			1		2		2		1	4	1	2		3		1	1	1	3		1	2	2	27	agriculture
12	education/research service			3		1		1	2		1	1		3			1							2	15	education/research service
16	public office																		1				1	2	public office	
10	movie/play service														1						1	52			54	movie/play service
07	livestock/fishery			1				1			2				2	3			1	1	1				12	livestock/fishery
09	financial business/advertisement			9					1	1															11	financial business/advertisement
05	cargo handling service			1		1			1			1			1	2	1	1							9	cargo handling service
02	mining			1		1																1	1		4	mining
11	telecommunication service																									telecommunication service
	total			218		190		166	197	199	163	127	152	111	147	124	153	112	101	112	106	164	98	110	2,750	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance 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
0802	retail			27		17		15	17	17	20	14	18	12	21	12	11	9	5	9	16	11	7	14	272	retail
1402	restaurant			23		23		24	23	24	16	17	18	15	23	20	36	14	14	9	21	13	13	13	359	restaurant
0112	metal products			11		15		10	12	12	14	10	5	10	18	16	10	10	9	5	3	6	10	9	195	metal products
0115	transport equipment products			6		14		14	10	6	4	8	5	8	2	7	12	8	5	5	5	5	2	9	135	transport equipment products
0108	chemical products			12		13		7	15	26	7	19	14	8	11	7	6	7	9	9	6	11	11	7	205	chemical products
1501	commercial cleaning and livestock process			8		3		3	2	9	7	2	2	1	1	1	5	6	1	4	3	3	4	7	72	commercial cleaning and livestock process
0302	construction work			20		19		13	18	22	10	9	10	1	11	8	8	7	8	9	7	8	7	6	201	construction work
0110	steel making			5		6		11	9	5	9	6	6	5	3	4	4	5	7	3	2	5	3	5	103	steel making

0403	road cargo transportation service			5		7		5	4	6	3	3	2	3	2	4	5	5	1	3	3	5	5	5	76	road cargo transportation service
0109	sand and stone products			4		3		7	1	1		1	2	1	1		4	1	1		1	2		4	34	sand and stone products
1301	medical treatment service									1		1	1				1		1	1				4	10	medical treatment service
0301	civil engineering work			17		7		8	9	5	6	4	1	4	6	1	3	3	3	6	2	6	3	3	97	civil engineering work
0801	wholesale			2		1			3	6	4	2	5	2	5	7	4	1	1	4	1		1	3	52	wholesale
0117	other manufacturing			15		14		11	22	6	10	5	13	7	6	8	10	11	12	6	11	8	6	2	183	other manufacturing
0303	other construction works			5		10		4	14	17	9	2	13	4	5	2	4	2	6	6	6	6	10	2	127	other construction works
0113	machine products			10		9		3	5	8	7	4	6	8	4	2	2	4	3	6	3	6	2	2	94	machine products
1702	others			5		2		3	6	2	2	2	7	1	4	2	1	1		4	5	2	3	2	54	others
0114	electrical equipment products			5		2		4	1	6	4	2	3	1	1	1	2	4	2	2	1		3	2	46	electrical equipment products
1403	other amusement service			3		2		1	2	3	4	3	2	3	3		1	2		4		2	2	2	39	other amusement service
1302	social welfare facility					1		1	2	1	3			1	2	2		1		1	3	2	1	2	23	social welfare facility
1201	education/research service			3		1		1	2		1	1		3			1							2	15	education/research service
0101	food products			7		9		6	5	4	8	3	5	2	3	4	4	4	2	3	1	4	1	1	76	food products
0111	nonferrous metal making					1			5	1	3		3	3		1	5			2	3			1	28	nonferrous metal making
0602	forestry					2				1	2	1	2		1		1	1	1	1			1	1	15	forestry
0601	agriculture			1				2			2				2					2		1	1	1	12	agriculture
1601	public office																		1					1	2	public office
1001	movie/play service															1					1	52			54	movie/play service

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																										service
0201	coal mining																									coal mining
0404	other transportation service																									other transportation service
0803	haircut/beauty salon																									haircut/beauty salon
0902	advertisement and mediator																									advertisement and mediator
1101	telecommunication service																									telecommunication service
	total			218		190		166	197	199	163	127	152	111	147	124	153	112	101	112	106	164	98	110	2,750	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance in Small industry (1999-2021)

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010909	other sand and stone products			2		2		5			1				2		1					3	16	other sand and stone products		
011509	other transport equipment products			2		1		2	2			1	2		1			1		1		3	16	other transport equipment products		
011701	auto mobile servicing			7		10		9	16	4	4	5	5	6	3	3	9	6	8	4	7	6	2	2	116	auto mobile servicing
030309	other construction works			4		10		2	13	13	7	2	5	4	5	2	2	1	4	5	4	3	2	2	90	other construction works
011501	ship building			2		10		5	2	4	1	4	3	4		3	10	4	3	3	1	1	1	2	63	ship building
010801	non organic or organic chemical products			5		5		2	2	4	2	3	3	3	2	1		3	1	1	3	5	2	2	49	non organic or organic chemical products
170209	others			5		2		3	3	2	2	2	7	1	4	2	1	1		1	5	2	3	2	48	others
080202	auto mobile retail			4		7		1	2	4	4		2	2		6	3		1	2	2	2		2	44	auto mobile retail
080204	fuel retail			2		3		4	4	5	1		2	3			1	1		3	3		2	2	36	fuel retail
140309	other amusement service			1		2				3	2	3	1	2	2		1	1		2		2		2	24	other amusement service
130201	social welfare facility					1		1	2	1	3			1	2	2		1		1	3	2	1	2	23	social welfare facility
011001	steel/iron/rolling products			1		1		1	1	1	1	3	1				1	1	2					2	16	steel/iron/rolling products
120109	other education/research service			3		1		1	2		1	1		3			1							2	15	other education/research service
011203	metal press products					2			1	1	1					2		2	1					2	12	metal press products
150109	other cleaning and livestock process service									2	2				1			2						2	9	other cleaning and livestock process service
010808	painting products									1									2					2	5	painting products
130102	general clinic									1		1												2	4	general clinic
011301	machine products			6		8		1	4	4	7	3	5	7	2	1	1	2	3	6	3	4	2	1	70	machine products
030201	steel frame/reinforced concrete house construction work			8		7			4	6	4	2	4			2	1	3	4	4		1	1	1	52	steel frame/reinforced concrete house construction work
010899	other chemical products			5		1		1	3	10	1	3	4	4	4	2	2			3	1	2	1	1	48	other chemical products

080201	all kinds of retail			5		4		4	2	3	5	2	2		2		3	4	2	2	2	2		1	45	all kinds of retail
010109	other foods			3		5		4	2	4	6	3	3		1	2	1	2	2	2		2	1	1	44	other foods
010805	plastics products			1		6		1		5	3	1		1			2	1	3		3	3	1	31	plastics products	
140209	other restaurants			1		4		1	1	4		4	1	1	2	2	6		1		2			1	31	other restaurants
010804	petroleum/coal products							1	1			8	5		1	4		1	1	2			1	1	26	petroleum/coal products
011403	electronics equipment and telecommunications apparatus			3				3		4	2		2		1			1	1	1			3	1	22	electronics equipment and telecommunications apparatus
011409	other electrical equipment			2		1		1		1	1	1	1	1			1	1	1	1				1	14	other electrical equipment
011109	other nonferrous metal products					1			3		1			1		1	3				2			1	13	other nonferrous metal products
011303	optical instruments			1		1		1		2		1		1	1			2				1		1	12	optical instruments
060101	agriculture			1				2			2				2					2		1	1	1	12	agriculture
060201	lumbering					1				1	2	1	1		1			1	1	1				1	11	lumbering
150101	building maintenance service			3							1								1		1	1		1	8	building maintenance service
010902	glass products			1				1					1	1			1							1	6	glass products
011201	western tableware/cutting tool products														1							1		1	3	western tableware/cutting tool products
130101	hospital												1				1							1	3	hospital
130109	other medical treatment service																		1	1				1	3	other medical treatment service
160101	public office																			1				1	2	public office
100101	movie production and delivery service																					52			52	movie production and delivery service
011709	other manufacturing			6		2		2	3		3		3	1	1	5	1	4	2	1	2		3		39	other manufacturing
030203	building facility construction work			3		3		3	5	3	2	2	2		2	2		1	1	1	1	2			33	building facility construction work

030302	machinery/apparatus setting work						1	1	3	2		8					1	2	1	2	2	7		30	machinery/apparatus setting work	
010803	pharmaceuticals						2	8		1	3	2	1	1		3		3		1		4		29	pharmaceuticals	
080409	other commerce			1			4		2	3	1	2	2	1	2	4	1	2	1		1	1		28	other commerce	
140101	hotel			1			2	1		1	2	1	1	4	2	4	1	4	3	1				28	hotel	
011702	machine repair			2		2		2	2	3		4		2				2		1	2	1		23	machine repair	
030106	road construction work			4		1		3	4	1		1		2		1			1		1	2	1		22	road construction work
030202	wooden house construction work			2		2		2			1	2	2	1	1				1	1	2	2	1		20	wooden house construction work
010104	bread/cake products			4		1		1			2		1	1		1	2	1		1		1			16	bread/cake products
010701	printing service			2		1		1	3	1			2			1			1						13	printing service
030110	water supply/sewage construction work			3		1		1		1	1				1			2					1		11	water supply/sewage construction work
150103	other waste disposal service			2				2	1	1	1							2			1		1		11	other waste disposal service
090109	other financial business			9						1															10	other financial business
140301	golf course			1				1	2		2		1							2			1		10	golf course
010806	rubber products			1		1				5					1		1								9	rubber products
010901	cement products			1		1		1	1	1					1						1	2			9	cement products
011009	other steel products			1				1	1			2		1		1	1						1		9	other steel products
011204	metal plating products			1		2					2			2	1	1									9	metal plating products
011305	other precision machine products			3				1	1	1			1		1							1			9	other precision machine products
011101	nonferrous metals/rolling products									1	1		2	2			1			1					8	nonferrous metals/rolling products
070101	livestock			1				1						1	2				1	1	1				8	livestock
010102	fishery products					2			2							1	1				1				7	fishery products
010509	other furniture			1				1		1		1			2	1									7	other furniture

011102	nonferrous metals casting products							2		1		1				1			1	1				7	nonferrous metals casting products
030301	electricity/telecommunication work			1				1		1						2					1	1		7	electricity/telecommunication work
040202	bus service			1					2	1			1			1								7	bus service
040302	specific truck transportation service					2		2							1	1				1				7	specific truck transportation service
010602	paper processing products			1								1			3	1								6	paper processing products
010807	leather products							1	1		1			1			1				1			6	leather products
011401	heavy electrical equipment								1		1				1		2			1				6	heavy electrical equipment
050101	land cargo handling service			1		1									1	1	1	1						6	land cargo handling service
170201	security service							3										3						6	security service
010409	other lumber and wood products					1		1		2							1							5	other lumber and wood products
011703	cleaning							1				1					1		1	1				5	cleaning
030109	land consolidation civil engineering work			1		1		1	1							1								5	land consolidation civil engineering work
140302	park and amusement park			1									1	1			1					1		5	park and amusement park
010209	other textile products					1		1					1	1										4	other textile products
011402	electrical appliance					1			1		1					1								4	electrical appliance
060209	other forestry					1						1				1						1		4	other forestry
080101	all kinds of wholesale			1				1	1										1					4	all kinds of wholesale
010101	meat/dairy products					1							1				1							3	meat/dairy products
010103	agricultural food products											1		1							1			3	agricultural food products
010204	dyeing										1	1					1							3	dyeing
010309	other fiber products					2										1								3	other fiber products
010401	lumbering					1			1										1					3	lumbering

010503	fittings												1			1					1			3	fittings
030105	bridge construction work									1									1		1			3	bridge construction work
030107	river civil engineering work			1						1									1					3	river civil engineering work
040309	other land cargo transportation service					1													1		1			3	other land cargo transportation service
070209	other fishery									2				1										3	other fishery
080401	warehousing							1			1			1										3	warehousing
170101	dispatch service			1							1										1			3	dispatch service
010106	soft drinks							1						1										2	soft drinks
010502	metal furniture			1					1															2	metal furniture
010601	pulp/paper			1		1																		2	pulp/paper
010609	other pulp/paper processing products								1		1													2	other pulp/paper processing products
010709	other printing and bookbinding												1				1							2	other printing and bookbinding
010903	pottery products												1				1							2	pottery products
011302	measuring instruments									1							1							2	measuring instruments
020202	gravel digging			1																	1			2	gravel digging
030108	sand collapse prevention civil engineering work									1									1					2	sand collapse prevention civil engineering work
040101	railroad service																				2			2	railroad service
040201	taxi service			1									1											2	taxi service
050202	port cargo handling service								1							1								2	port cargo handling service
100109	other movie/play service														1					1				2	other movie/play service
130309	other health and hygiene service												1		1									2	other health and hygiene service
010105	alcoholic drinks								1															1	alcoholic drinks

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090102	stock/commodity trade business																									stock/commodity trade business
090201	traveling service																									traveling service
090209	other advertisement and mediator																									other advertisement and mediator
100102	movie theatre																									movie theatre
110101	telecommunication service																									telecommunication service
120101	auto mobile practical training																									auto mobile practical training
120102	software service																									software service
130301	bathhouse																									bathhouse
150104	cremation service																									cremation service
150105	livestock process service																									livestock process service
170202	information processing service																									information processing service
	total			218		190		166	197	199	163	127	152	111	147	124	153	112	101	112	106	164	98	110	2,750	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