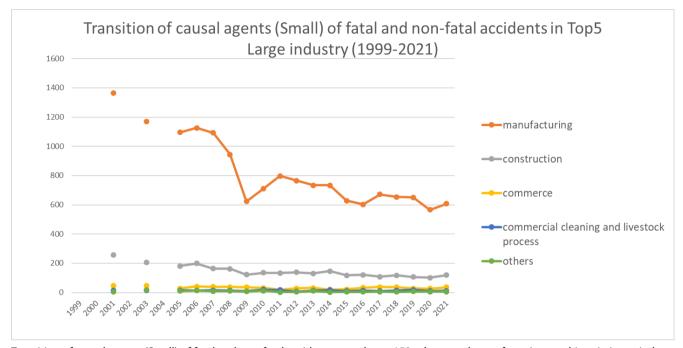
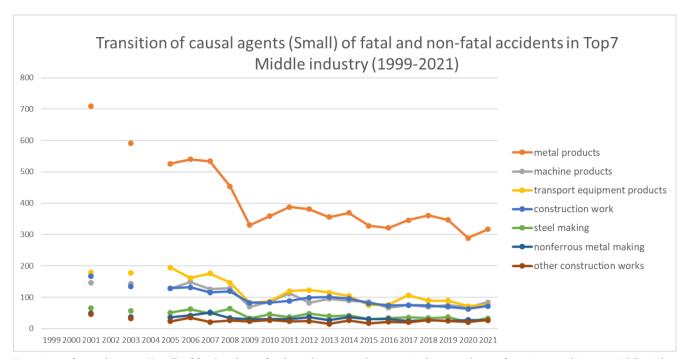
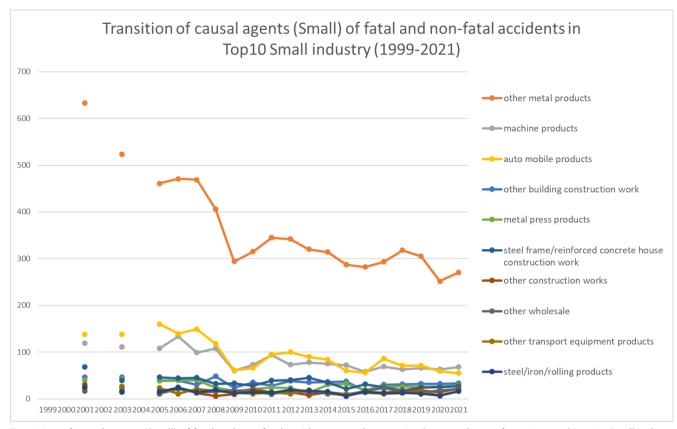
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines in Middle Industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines in Small Industry (1999-2021)

## Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines 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			1,366		1,170		1,096	1,126	1,093	944	623	709	798	766	734	734	628	603	672	653	650	566	607	15,538	manufacturing
03	construction			257		207		182	199	164	162	123	135	133	139	131	147	118	120	108	118	107	102	119	2,771	construction
08	commerce			45		48		28	41	39	37	36	31	19	28	31	20	21	33	38	36	28	27	36	622	commerce
15	commercial cleaning and			14		16		16	14	16	14	o	20	17	8	14	17	10	14	10	13	18	11	12	263	commercial cleaning and
	livestock process			17					17				20	.,		17								12	203	livestock process
17	others			5		19		11	14	9	11	8	12	3	4	11	3	4	4	6	4	7	6	6	147	others
04	transportation service			8		9		5	7	4	7	9	3	5	3	6	3	10	3	2	1	4	4	3	96	transportation service
06	agriculture			4		3		1	4	4	3	1	3				1	1			1			1	27	agriculture

05	cargo handling service		1	1	3	4	5	2	2	1		1			1	1	3				1	26	cargo handling service
07	livestock/fishery		1		4	2		1	1		3		2				2	3	1	3	1	24	livestock/fishery
13	health and hygiene service		4			1		3	5	1	1	1		1	1		1		2	2	1	24	health and hygiene service
09	financial		1		1		2	1							1						1	7	financial
09	business/advertisement		•		'			<u>'</u>															business/advertisement
14	hotel/restaurant/amusement		5	3	4	2	,	5	1	5	1	5		2			1	2		,		40	hotel/restaurant/amusement
Ľ	service								ľ		<u> </u>						<u> </u>					10	service
12	education/research service		5	3	1		3		2	1	1	1		1	1		1			1		21	education/research service
02	mining					1		1	1				2	2						1		8	mining
16	public office			1	1											1						3	public office
10	movie/play service																						movie/play service
11	telecommunication service																						telecommunication service
	total		1,716	1,480	1,353	1,415	1,341	1,191	821	921	981	956	931	931	796	779	844	831	817	725	788	19,617	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines 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
0112	metal products			709		592		526	540	534	454	330	359	388	381	356	369	328	321	346	361	347	289	317	7,847	metal products
0113	machine products			146		143		128	149	126	129	70	85	112	82	95	89	85	67	75	70	75	68	84	1,878	machine products
0115	transport equipment products			179		178		195	162	176	147	82	87	120	123	115	104	75	76	106	89	89	72	75	2,250	transport equipment products
0302	construction work			167		134		129	132	115	119	82	83	88	99	101	96	81	73	75	73	70	63	72	1,852	construction work
0110	steel making			65		56		51	62	49	64	33	46	37	48	40	42	30	34	36	34	37	21	33	818	steel making
0111	nonferrous metal making			49		37		36	42	52	34	30	30	30	37	27	37	31	31	24	27	25	28	27	634	nonferrous metal
0303	other construction works			46		33		23	35	21	26	23	27	23	24	15	26	17	22	20	27	25	21	27	481	other construction works
																										electrical equipment

0114	electrical equipment products	71	61	38	55	52	39	18	34	41	37	37	32	29	23	34	17	31	31	26	706	products
0801	wholesale	19	25	12	23	15	15	19	15	10	17	15	11	12	17	23	17	15	18	21	319	wholesale
0301	civil engineering work	44	40	30	32	28	17	18	25	22	16	15	25	20	25	13	18	12	18	20	438	civil engineering wor
0117	other manufacturing	39	32	35	41	27	27	21	22	15	19	22	20	14	19	17	18	13	21	18	440	other manufacturing
0109	sand and stone products	12	17	15	14	16	11	11	8	6	12	9	8	5	5	13	8	5	10	13	198	sand and stone products
1501	commercial cleaning and livestock	14	16	16	14	16	14	9	20	17	8	14	17	10	14	10	13	18	11	12	263	commercial cleaning
0802	retail	23	19	11	16	18	18	12	14	6	7	15	8	7	14	14	14	10	6	11	243	retail
0108	chemical products	36	20	31	19	24	11	7	12	23	9	17	13	14	11	11	10	10	13	8	299	chemical products
1702	others	3	13	9	12	8	10	7	10	3	3	9	3	4	4	3	4	7	5	4	121	others
0804	other commerce	3	4	5	2	6	4	5	2	3	4	1	1	2	2	1	5	3	3	4	60	other commerce
0105	furniture	6	7	9	2	5	4	4	3	8	6	4	4	7	5	1	3	5	1	3	87	furniture
0403	road cargo transportation service	6	9	4	6	4	6	9	3	4	3	6	2	9	2	2	1	4	4	3	87	road cargo transportation servi
1701	dispatch service	2	6	2	2	1	1	1	2		1	2				3			1	2	26	dispatch service
0106	pulp/paper processing products	7	5	5	6	2	3	2	4	3	1		3		3	2	2	3		1	52	pulp/paper processi products
0107	printing/bookbinding	8	6	3	4	5	2	3	3	1	2		2	1		1	4			1	46	printing/bookbindir
0501	land cargo handling service	1	1	2	3	4	2	1	1		1			1	1	2				1	21	land cargo handling
0701	livestock	1		4	2		1	1		3		2				1	2		3	1	21	livestock
0102	textile products	4	2	1	2	2		1	1	1			1		1				3	1	20	textile products
0602	forestry	3	3		2	4	2	1	3											1	19	forestry
1302	social welfare facility	1			1		1	2	1				1	1		1		2	1	1	13	social welfare facilit
0902	advertisement and mediator	1		1		1	1							1						1	6	advertisement and

0101	food products		29	6	19	22	14	12	6	8	6	3	6	6	3	1	3	8	3	4	159	food products
0104	wood products		4	6	4	6	8	5	4	4	6	5	4	4	5	3	1	1	6	4	80	wood products
1201	education/research service		5	3	1		3		2	1	1	1		1	1		1			1	21	education/research service
1403	other amusement service			1	1			5	1	3	1	4		1			1	2		1	21	other amusement service
0103	fiber products		1	2				1	1	3	1		2		1	3	2		1	1	19	fiber products
1402	restaurant		4	2	3	2	2			2		1		1							17	restaurant
1301	medical treatment service		3					2	1		1	1								1	9	medical treatment service
0601	agriculture		1		1	2		1						1	1			1			8	agriculture
0116	electric/gas/water service		1				1	1				1						1			5	electric/gas/water service
0402	road passenger transport service		1		1			1						1	1						5	road passenger transport service
0502	harbor transportation service				1	1	1		1								1				5	harbor transportation service
0202	quarrying							1	1				1	1							4	quarrying
0203	other mining					1							1	1						1	4	other mining
0401	railroad/water transportation/airline service		1			1					1					1					4	railroad/water transportation/airline service
0702	fishery																1	1	1		3	fishery
1601	public office			1	1											1					3	public office
1303	other health and hygiene service								2												2	other health and hygiene service
1401	hotel		1																	1	2	hotel
0901	financial business						1														1	financial business

0201	coal mining																						coal mining
0404																							other transportation
0404	other transportation service																						service
0803	haircut/beauty salon																						haircut/beauty salon
1001	movie/play service																						movie/play service
1101	telecommunication service																						telecommunication
1101	telecommunication service																						service
	total		1,716	1,480	1,353	1,415	1,341	1,191	821	921	981	956	931	931	796	779	844	831	817	725	788	19,617	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 159 other metal manufacturing machines 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
011209	other metal products			633		523		461	471	469	406	294	315	345	342	320	314	287	282	293	318	305	252	270	6,900	other metal products
011301	machine products			119		111		108	134	99	108	60	73	94	73	78	75	72	58	69	63	66	63	68	1,591	machine products
011502	auto mobile products			138		138		160	139	149	118	61	66	95	100	90	84	60	56	86	71	71	59	55	1,796	auto mobile products
030209	other building construction work			46		46		39	39	30	48	24	35	28	38	35	36	37	17	30	31	32	32	33	656	other building construction
011203	metal press products			40		42		38	39	40	24	17	21	24	23	13	30	32	19	27	26	26	26	29	536	metal press products
030201	steel frame/reinforced concrete house construction work			68		39		46	44	45	32	33	28	39	40	45	35	21	31	25	18	24	25	27	665	steel frame/reinforced concrete house construction work
030309	other construction works			30		17		11	24	12	6	10	20	14	14	8	14	10	15	13	17	18	14	22	289	other construction works
080109	other wholesale			16		23		11	21	14	15	18	15	10	17	15	11	8	17	23	16	13	18	21	302	other wholesale
011509	other transport equipment products			24		26		23	11	21	17	13	11	13	11	18	14	10	13	11	12	15	7	16	286	other transport equipment products
011001	steel/iron/rolling products			24		14		15	24	14	19	12	14	13	19	17	15	6	15	12	13	11	7	16	280	steel/iron/rolling products
011409	other electrical equipment			43		33		18	31	27	17	9	17	23	19	19	14	11	11	17	11	14	17	15	366	other electrical equipment
011305	other precision machine			24		26		14	12	22	17	5	10	12	8	13	10	11	6	5	4	6	4	15	224	other precision machine

030203 worl 011102 proc 011109 proc 011202 scre 011009 othe 011403 telec	h - u																						products
030203 worl 011102 proc 011109 proc 011202 scre 011009 othe 011403 telec	ner manuracturing	2	5	13	17	28	16	11	13	16	8	13	15	11	9	11	6	8	9	12	11	252	other manufacturing
011102 proc 011109 othe 011202 scre 011009 othe 011403 telec	uilding facility construction	3	1	22	15	18	19	21	8	9	10	14	13	8	11	11	15	14	5	3	10	257	building facility construction work
011109 proc 011202 scre 011009 othe 011403 telec	onferrous metals casting oducts	2	4	12	10	17	25	13	9	16	9	15	9	18	11	11	10	9	11	10	10	249	nonferrous metals casting products
011009 other elect	her nonferrous metal oducts	1.	5	14	23	13	19	12	15	11	12	16	10	11	13	14	9	14	5	5	10	241	other nonferrous metal products
elec 011403 telec	rew products	2	0	16	16	22	18	10	11	13	10	11	14	12	5	10	15	7	11	6	10	237	screw products
011403 tele	her steel products	2	4	23	18	19	20	25	7	16	10	15	12	15	13	8	13	14	15	5	9	281	other steel products
	ectronics equipment and lecommunications oparatus	1.	5	18	9	10	15	10	6	12	13	9	7	10	4	3	9	3	9	10	9	181	electronics equipment and telecommunications apparatus
011002 cast	sting products	1	7	19	18	19	15	20	14	16	14	14	11	12	11	11	11	7	11	9	8	257	casting products
030199 othe	her civil engineering work	1	8	9	15	17	14	9	5	12	8	10	9	12	8	17	6	7	7	12	8	203	other civil engineering work
150102	dustrial waste management rvice	6		9	9	9	13	8	5	8	10	3	6	8	7	9	8	8	12	8	8	154	industrial waste management service
011101	onferrous metals/rolling	1	0	11	3	12	8	9	6	3	9	6	8	8	7	6	5	4	9	13	7	144	nonferrous metals/rolling products
010901 cem	ment products	4		9	7	6	8	5	4	2	5	8	3	4	4	5	9	4	3	6	7	103	cement products
010805 plas	astics products	1.	5	15	16	9	16	5	3	10	12	5	14	9	9	7	9	6	7	5	5	177	plastics products
080209 othe	her retails	1	1	15	9	13	13	13	9	10	4	7	11	6	4	11	9	10	6	4	5	170	other retails
011204 met	etal plating products	7		5	5	3	3	6	6	9	7	3	4	8	2	6	5	6	5	2	5	97	metal plating products
030110	nter supply/sewage nstruction work	9		13	4	3	5	2	4	6	4	2	2	6	5	5	1	3	2	1	5	82	water supply/sewage construction work
011702 mac	achine repair	2		6	6	4	2	4	3	2	1	3	2	5	2	1	3	2	1	1	5	55	machine repair
170209 othe																			7				
030106 road	hers	3		12	9	12	7	9	/	8	3	2	9	3	4	4	3	4		5	4	115	others

011501	ship building		15	11	10	9	6	9	4	9	11	11	6	6	3	5	9	4	3	6	3	140	ship building
030302	machinery/apparatus setting work		6	10	10	5	8	13	8	3	5	5	7	7	6	5	4	7	5	5	3	122	machinery/apparatus setting work
040301	general truck transportation service		6	9	4	5	3	6	7	2	4	3	5	2	8	1	2	1	4	4	3	79	general truck transportation service
011201	western tableware/cutting tool products		9	6	6	5	4	8	2	1	2	2	5	5	2	4	6	4		3	3	77	western tableware/cutting tool products
010909	other sand and stone products		6	6	4	6	5	1	5	3	1	3	4	3			4	4	1	3	3	62	other sand and stone products
080409	other commerce		3	4	5	2	6	4	4	1	3	4	1	1	2	1	1	5	3	3	3	56	other commerce
010903	pottery products		1	1	1			1						1	1						3	9	pottery products
030202	wooden house construction work		22	27	29	31	21	18	17	11	11	7	8	17	12	14	5	10	9	3	2	274	wooden house construction work
011701	auto mobile servicing		12	13	10	5	7	11	5	4	6	3	5	4	2	6	8	8	3	8	2	122	auto mobile servicing
030301	electricity/telecommunication work		10	6	2	6	1	7	5	4	4	5		5	1	2	3	3	2	2	2	70	electricity/telecommunication work
010899	other chemical products		7	1	5	1	2	2	2		3	1			2		2	1		3	2	34	other chemical products
030109	land consolidation civil engineering work		6	4	4	3	2	2		1	2		2	3		1		1			2	33	land consolidation civil engineering work
080204	fuel retail		4	1	1	1	2		2	2			2		2	2	3	2	2		2	28	fuel retail
150109	other cleaning and livestock process service		2	2		2		2	1	2	4	1	3	1		1		3	1	1	2	28	other cleaning and livestock process service
170101	dispatch service		2	6	2	2	1	1	1	2		1	2				3			1	2	26	dispatch service
080202	auto mobile retail		2	1		1		2	1	1	1		1			1		1	2	2	2	18	auto mobile retail
080201	all kinds of retail		3	2	1	1	3	2		1					1		1				2	17	all kinds of retail
011402	electrical appliance		8	8	10	9	7	8	2	3	5	8	8	4	5	4	4	1	6	2	1	103	electrical appliance
150103	other waste disposal service		4	4	6	3	2	3	2	10	1	3	3	8	3	2	2	1	4	2	1	64	other waste disposal service
011401	heavy electrical equipment		5	2	1	5	3	4	1	2		1	3	4	9	5	4	2	2	2	1	56	heavy electrical equipment

010806	rubber products		9	4	6	6	4	1	1	2	4	1	2	2	1	3		2	1	4	1	54	rubber products
010701	printing service		7	5	1	4	3	1	2	3	1	2					1	3			1	34	printing service
010509	other furniture		2		2	2	2				3	4	2	2	4	1	1	2	1	1	1	30	other furniture
011503	railway vehicle products		2	3	2	3		3	4	1	1	1	1		2	2		2			1	28	railway vehicle products
010502	metal furniture		2	2	3		2	2	1	2	4			1	2	4			1		1	27	metal furniture
011303	optical instruments			1	6	1	1		3		4			2					1	1	1	21	optical instruments
050101	land cargo handling service		1	1	2	3	4	2	1	1		1			1	1	2				1	21	land cargo handling service
070101	livestock		1		4	2		1	1		3		2				1	2		3	1	21	livestock
150101	building maintenance service		2	1	1		1	1	1		2	1	2			2		1	1		1	17	building maintenance service
010503	fittings		1	1	2			1	2	1	1		1	1					3		1	15	fittings
010209	other textile products		2	2		1	2		1		1					1				3	1	14	other textile products
060209	other forestry		3	2		1	3	1	1	2											1	14	other forestry
130201	social welfare facility		1			1		1	2	1				1	1		1		2	1	1	13	social welfare facility
030104	railway construction work		1	1	1	1	1			1							2			2	1	11	railway construction work
090209	other advertisement and mediator				1		1	1							1						1	5	other advertisement and mediator
080401	warehousing								1	1						1					1	4	warehousing
010601	pulp/paper																1				1	2	pulp/paper
010109	other foods		13	1	8	13	7	8	3	4	4	1	4	3			2	4	2	2		79	other foods
010409	other lumber and wood products		4	6	2	2	5	4	3	3	4	3	4	3	3	3	1	1	3	3		57	other lumber and wood products
010602	paper processing products		5	3	4	5	2	3	2	3	2			3		3		1	2			38	paper processing products
011302	measuring instruments		3	3		2	4	3	2	2	2	1	3	2	2	3	1	2	2			37	measuring instruments
010102	fishery products		5		4	3	2	1	1	1	2	1	1	1	1							23	fishery products
010104	bread/cake products		6	3	3	3	2	2		1			1	1				1				23	bread/cake products
120109	other education/research service		5	3	1		3		2	1	1	1		1	1		1					20	other education/research service
						1		1															

 $\neg$ 

010101	meat/dairy products		4	2	2	1	1	1	1	1		1		1				2		2	19	meat/dairy products
030105	bridge construction work		1	2	2	2	2	1	1	1	2		1	1		1	1	1			19	bridge construction work
010309	other fiber products		1	1				1	1	3	1		2		1	2	2		1	1	17	other fiber products
010401	lumbering				1	4	2	1		1	2	1		1					2		15	lumbering
010501	wood furniture		1	4	2		1	1	1			2	1		1			1			15	wood furniture
010801	non organic or organic		1		3		1	2			2	1		1	1			1	1	1	15	non organic or organic
010902	glass products				2	2	2	3	2			1	1						1	1	15	glass products
140201	general restaurant		4	2	2		1			2		1		1							13	general restaurant
010609	other pulp/paper processing products		2	2	1	1				1	1	1					1	1	1		12	other pulp/paper processing products
080101	all kinds of wholesale		3	2		2									2			1	2		12	all kinds of wholesale
011703	cleaning				2	4	2	1							1	1					11	cleaning
030111	port/seaside construction work		2	2					1		1	1		1	1		1	1			11	port/seaside construction work
140309	other amusement service				1			3	1		1	2					1	1		1	11	other amusement service
080203	furniture/fittings retail		3					1			1		1	2			1	1			10	furniture/fittings retail
140301	golf course			1				2		3		2		1				1			10	golf course
010103	agricultural food products		1			1	2		1	1					1			1			8	agricultural food products
010402	plywood				1		1		1			1			2				1	1	8	plywood
060101	agriculture		1		1	2		1						1	1			1			8	agriculture
010905	other ceramic products			1	1			1		3			1								7	other ceramic products
010702	bookbinding		1		1		1	1	1					1							6	bookbinding
010709	other printing and bookbinding			1	1		1							1	1			1			6	other printing and bookbinding
130101	hospital		2					1	1		1	1									6	hospital
170201	security service			1			1	1		2		1									6	security service

010106	soft drinks				1										1	1	1		1		5	soft drinks
010803	pharmaceuticals		1					1	1						1	1					5	pharmaceuticals
011304	watch products			2				1					1					1			5	watch products
030108	sand collapse prevention civil engineering work			2			1			1								1			5	sand collapse prevention civil engineering work
040309	other land cargo transportation service						1		2	1						1					5	other land cargo transportation service
060201	lumbering			1		1	1	1		1											5	lumbering
080102	furniture/fittings wholesale				1		1		1						2						5	furniture/fittings wholesale
010804	petroleum/coal products		1		1						1								1		4	petroleum/coal products
010808	painting products		1			2							1								4	painting products
010809	chemical fertilizer products		1			1	1				1										4	chemical fertilizer products
020309	other mining					1							1	1						1	4	other mining
030102	tunnel construction work								2		1								1		4	tunnel construction work
030107	river civil engineering work			1				1		1										1	4	river civil engineering work
040202	bus service				1			1						1	1						4	bus service
050202	port cargo handling service				1	1	1										1				4	port cargo handling service
140209	other restaurants				1	2	1														4	other restaurants
010203	weaving		1		1					1											3	weaving
010204	dyeing		1			1								1							3	dyeing
011603	city water service						1					1						1			3	city water service
020202	gravel digging							1	1					1							3	gravel digging
040101	railroad service		1			1					1										3	railroad service
040302	specific truck transportation service					1							1		1						3	specific truck transportation service
070209	other fishery																1	1	1		3	other fishery
130109	other medical treatment		1					1												1	3	other medical treatment

	service																	service
160101	public office			1	1									1			3	public office
010105	alcoholic drinks				1	1											2	alcoholic drinks
010301	over/under wear			1										1			2	over/under wear
010807	leather products										1		1				2	leather products
010904	fire resisting products		1				1										2	fire resisting products
130301	bathhouse								2								2	bathhouse
140101	hotel		1													1	2	hotel
011602	city gas service							1									1	city gas service
011609	other electric/gas/water		1														1	other electric/gas/water
011003	service		Ŀ															service
020201	quarrying											1					1	quarrying
040102	water transportation service													1			1	water transportation service
040201	taxi service		1														1	taxi service
050201	general harbor transportation								1								1	general harbor transportation
	service																	service
090103	insurance business						1										1	insurance business
090201	traveling service		1														1	traveling service
120101	auto mobile practical training															1	1	auto mobile practical training
010201	silk-reeling																	silk-reeling
010202	cotton-spinning																	cotton-spinning
010802	chemical fiber																	chemical fiber
011601	electric utility service																	electric utility service
011704	tobacco products																	tobacco products
020101	general coal mining																	general coal mining
020109	other coal mining																	other coal mining
020209	other quarrying																	other quarrying
													i					

020301	metal mining													metal 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
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
070201	fishery													fishery
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
090109	other financial business													other financial business
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
110101	telecommunication service													telecommunication service
120102	software service													software service
130102	general clinic													general clinic

130309	other health and hygiene service																						other health and hygiene service
140302	park and amusement park																						park and amusement park
150104	cremation service																						cremation service
150105	livestock process service																						livestock process service
170202	information processing																						information processing
1	service																						service
	total		1,716	1,480	1,353	1,415	1,341	1,191	821	921	981	956	931	931	796	779	844	831	817	725	788	19,617	total

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

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