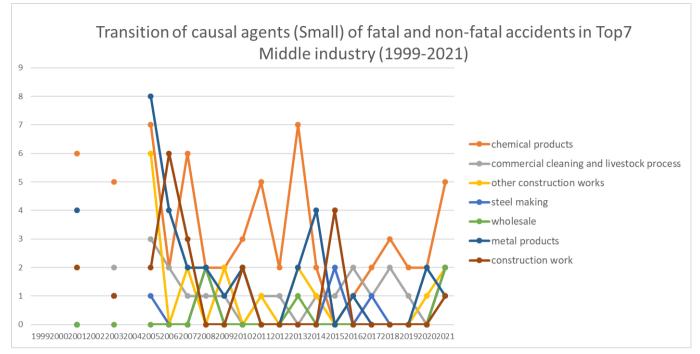
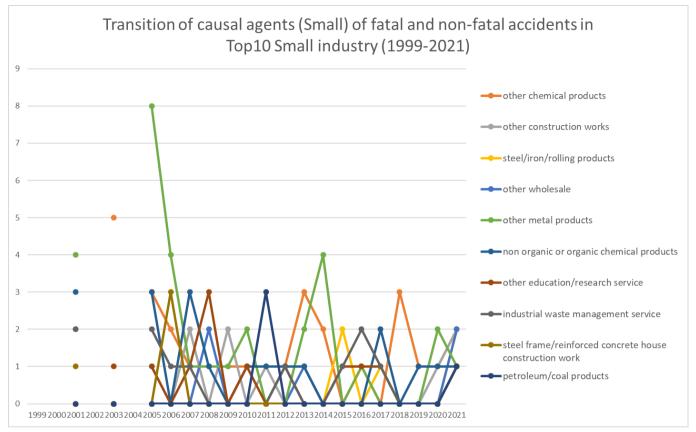


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive substance in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive substance in Middle Industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive substance in Small Industry (1999-2021)

## Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive 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			29		37		28	11	10	10	11	8	9	8	15	15	7	6	8	7	4	4	9	236	manufacturing
03	construction			6		3		8	7	7	2	2	2	1		3	1	4	1		1	1	1	4	54	construction
08	commerce			2		3			1	2	3		3			4			2		1	1	1	2	25	commerce
15	commercial cleaning and			2		2		2	2	1	1	1		1	1		1	1	2	1	2	1		2	24	commercial cleaning and
-	livestock process					<u>د</u>			2		·										2					livestock process
12	education/research service					1		1		1	3		1		1			1	1	1				1	12	education/research service
14	hotel/restaurant/amusement			2					2	2		2	2		2	1	1		1	1	1	2	1		24	hotel/restaurant/amusement
	service			5					2	5		2	2		2							5			24	service

04	transportation service		1	1	1	4	1	2	1	2	1	1	2		2				2	1		22	transportation service
17	others		3		1		1				1	1	2		1	2						12	others
13	health and hygiene service							1			1	2	4			1				2		11	health and hygiene service
02	mining			1	2						1	1					2	1				8	mining
05	cargo handling service		1			2												1				4	cargo handling service
10	movie/play service								1	2					1							4	movie/play service
07	livestock/fishery																1			1		2	livestock/fishery
09	financial						1			1												2	financial
	business/advertisement						Ľ																business/advertisement
11	telecommunication service																		2			2	telecommunication service
06	agriculture																						agriculture
16	public office																						public office
	total		47	48	44	29	27	22	19	21	15	17	31	18	17	16	14	14	14	11	18	442	total

## Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive 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	202	l tota	Middle industry
0108	chemical products			6		5		7	2	6	2	2	3	5	2	7	2		1	2	3	2	2	5	64	chemical products
1501	commercial cleaning and livestock process			2		2		3	2	1	1	1		1	1		1	1	2	1	2	1		2	24	commercial cleaning and livestock process
0303	other construction works			2		1		6		2		2		1		2	1						1	2	20	other construction works
0110	steel making					1		1			2							2		1				2	9	steel making
0801	wholesale										2					1								2	5	wholesale
0112	metal products			4		1		8	4	2	2	1	2			2	4		1				2	1	34	metal products
0302	construction work			2		1		2	6	3			2					4						1	21	construction work
0301	civil engineering work			2		1			1	2	2					1			1		1	1		1	13	civil engineering work

	L				L	1														<u>n</u>				<u> </u>
1201	education/research service			1		1		1	3		1		1			1	1	1				1	12	education/research service
0113	machine products			2		1								1		1						1	6	machine products
0117	other manufacturing		6	17		6	2	2	2	1	2		1	3	2	3	1	2		2			52	other manufacturing
0101	food products		4	3		3	2				1	1		1	2	1	1	2	1				22	food products
0403	road cargo transportation service		1	1		1	4	1	2		2	1	1	2		2				2	1		21	road cargo transportation service
0111	nonferrous metal making		5						1	5		1	1	1	1				2				17	nonferrous metal making
0802	retail		1	3			1	1	1		3			2			1		1	1	1		16	retail
1402	restaurant							2		2	2		2	1			1	1	1	3	1		16	restaurant
0114	electrical equipment products		1	6						1			2		2		2		1				15	electrical equipment products
1702	others		3			1		1				1	1	2		1	2						12	others
0115	transport equipment products			2		1	1					2			1			1					8	transport equipment products
0202	quarrying			1		2						1	1					2	1				8	quarrying
1301	medical treatment service								1				2	4									7	medical treatment service
1403	other amusement service		2				2	1															5	other amusement service
1001	movie/play service									1	2					1							4	movie/play service
1302	social welfare facility											1					1				2		4	social welfare facility
0104	wood products		1										1		1								3	wood products
0109	sand and stone products								1	1			1										3	sand and stone products
0804	other commerce		1					1						1									3	other commerce

1401	hotel		1					1			1						3	hotel
0501	land cargo handling service					1								1			2	land cargo handling service
0502	harbor transportation service		1			1											2	harbor transportation service
0702	fishery												1			1	2	fishery
1101	telecommunication service														2		2	telecommunication service
0102	textile products				1												1	textile products
0106	pulp/paper processing products		1														1	pulp/paper processing products
0116	electric/gas/water service		1														1	electric/gas/water service
0401	railroad/water transportation/airline service							1										railroad/water transportation/airline service
0803	haircut/beauty salon											1					1	haircut/beauty salon
0901	financial business								1								1	financial business
0902	advertisement and mediator						1										1	advertisement and mediator
0103	fiber products																	fiber products
0105	furniture																	furniture
0107	printing/bookbinding																	printing/bookbinding
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
0404																							service
0601	agriculture																						agriculture
0602	forestry																						forestry
0701	livestock																						livestock
1202	other health and hygiene service																						other health and
	other health and hygiene service																						hygiene service
1601	public office																						public office
1701	dispatch service																						dispatch service
	total		47	48	44	29	27	22	19	21	15	17	31	18	17	16	14	14	14	11	18	442	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 511 explosive substance in Small industry (1999-2021)

code	Small industry	1999	2000	2001	2002	2003 2	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Small industry
010899	other chemical products			2		5		3	2	1	1	1	1	1	1	3	2		1		3	1	1	2	31	other chemical products
030309	other construction works			2				1		2		2		1									1	2	11	other construction works
011001	steel/iron/rolling products																	2		1				2	5	steel/iron/rolling products
080109	other wholesale										2					1								2	5	other wholesale
011209	other metal products			4				8	4	1	1	1	2			2	4		1				2	1	31	other metal products
010801	non organic or organic chemical products			3				3		3	1		1	1	1	1				2		1	1	1	19	non organic or organic chemical products
120109	other education/research service					1		1		1	3		1		1			1	1	1				1	12	other education/research service
150102	industrial waste management service			2				2	1	1					1			1	2	1				1	12	industrial waste management service
	steel frame/reinforced concrete house construction			1					3															1		steel frame/reinforced concrete house construction

	work																						work
010804	petroleum/coal products										3										1	4	petroleum/coal products
010805	plastics products		1				1						1								1	4	plastics products
011301	machine products				1								1		1						1	4	machine products
030102	tunnel construction work			1				2													1	4	tunnel construction work
150103	other waste disposal service								1									1			1	3	other waste disposal service
011709	other manufacturing		4	13	4	2	2	2	1	1		1	3	2	2	1	2		1			41	other manufacturing
040301	general truck transportation service		1	1	1	4	1	2		2	1		2		2				2	1		20	general truck transportation service
140201	general restaurant						2		2	2		2	1			1	1	1	3	1		16	general restaurant
030209	other building construction work		1		1	1	3			2					4							12	other building construction work
170209	others		3		1		1				1	1	2		1	2						12	others
080209	other retails			2		1		1		2			1			1		1	1	1		11	other retails
010109	other foods		1	1	1	1					1			1	1		2	1				10	other foods
011101	nonferrous metals/rolling products								4		1	1	1	1				1				9	nonferrous metals/rolling products
011403	electronics equipment and telecommunications apparatus		1	6												1						8	electronics equipment and telecommunications apparatus
011502	auto mobile products			2	1	1					2			1			1					8	auto mobile products
020201	quarrying			1	2						1	1					2	1				8	quarrying
030302	machinery/apparatus setting work			1	5									1								7	machinery/apparatus setting work
011102	nonferrous metals casting products		5															1				6	nonferrous metals casting products
011409	other electrical equipment								1			2		1		1		1				6	other electrical equipment

150101	building maintenance service			2				1			1			1			1			6	building maintenance service
010101	meat/dairy products	1				1							1	1		1				5	meat/dairy products
011701	auto mobile servicing			3	1													1		5	auto mobile servicing
030199	other civil engineering work	1				1	1										1	1		5	other civil engineering work
130101	hospital											2	3							5	hospital
011002	casting products			1	1			2												4	casting products
011703	cleaning			1	1					1					1					4	cleaning
130201	social welfare facility										1					1			2	4	social welfare facility
010102	fishery products			2						1										3	fishery products
010104	bread/cake products	2	2		1															3	bread/cake products
010809	chemical fertilizer products						1						2							3	chemical fertilizer products
030202	wooden house construction work				1	2														3	wooden house construction work
080202	auto mobile retail	1					1			1										3	auto mobile retail
100109	other movie/play service								1	2										3	other movie/play service
140101	hotel	1							1					1						3	hotel
140309	other amusement service	1				2														3	other amusement service
150109	other cleaning and livestock process service				1	1												1		3	other cleaning and livestock process service
010409	other lumber and wood products	1										1								2	other lumber and wood products
010803	pharmaceuticals				1					1										2	pharmaceuticals
010909	other sand and stone products								1			1								2	other sand and stone products
011109	other nonferrous metal products							1	1											2	other nonferrous metal products
	other precision machine																				other precision machine

011305	products			2														2	products
011702	machine repair		2															2	machine repair
30109	land consolidation civil engineering work						1				1							2	land consolidation civil engineering work
30301	electricity/telecommunication work										2							2	electricity/telecommunication work
50101	land cargo handling service					1								1			-	2	land cargo handling service
50202	port cargo handling service		1			1											-	2	port cargo handling service
80409	other commerce		1				1										-	2	other commerce
10101	telecommunication service															2		2	telecommunication service
40301	golf course		1				1										-	2	golf course
10103	agricultural food products				1													1	agricultural food products
10204	dyeing				1													1	dyeing
10401	lumbering											1						1	lumbering
010601	pulp/paper		1															1	pulp/paper
10808	painting products								1									1	painting products
010903	pottery products							1										1	pottery products
011202	screw products						1											1	screw products
011203	metal press products							1										1	metal press products
011204	metal plating products			1														1	metal plating products
011402	electrical appliance											1						1	electrical appliance
011602	city gas service		1															1	city gas service
30105	bridge construction work												1					1	bridge construction work
30106	road construction work		1															1	road construction work
030203	building facility construction work			1														1	building facility construction work

040101	railroad service							1									1	railroad service
040309	other land cargo transportation service									1							1	other land cargo transportation service
070201	fishery													1			1	fishery
070209	other fishery															1	1	other fishery
080204	fuel retail			1													1	fuel retail
080205	newspaper retail										1						1	newspaper retail
080301	haircut												1				1	haircut
080401	warehousing										1						1	warehousing
090109	other financial business								1								1	other financial business
090209	other advertisement and mediator					1											1	other advertisement and mediator
100101	movie production and delivery service											1					1	movie production and delivery service
130102	general clinic						1										1	general clinic
130109	other medical treatment service										1						1	other medical treatment service
010105	alcoholic drinks																	alcoholic drinks
010106	soft drinks																	soft drinks
010201	silk-reeling																	silk-reeling
010202	cotton-spinning																	cotton-spinning
010203	weaving																	weaving
010209	other textile products																	other textile products
010301	over/under wear																	over/under wear
010309	other fiber products																	other fiber products
010402	plywood																	plywood
010501	wood furniture																	wood furniture

		 	 n n	 	 	 	 	 	 	· · · · · ·	 	 
010502	metal furniture											metal furniture
010503	fittings											fittings
010509	other furniture											other furniture
010602	paper processing products											paper processing products
010609	other pulp/paper processing products											other pulp/paper processing products
010701	printing service											printing service
010702	bookbinding											bookbinding
010709	other printing and bookbinding											other printing and bookbinding
010802	chemical fiber											chemical fiber
010806	rubber products											rubber products
010807	leather products											leather products
010901	cement products											cement products
010902	glass products											glass products
010904	fire resisting products											fire resisting products
010905	other ceramic products											other ceramic products
011009	other steel products											other steel products
011201	western tableware/cutting tool products											western tableware/cutting tool products
011302	measuring instruments											measuring instruments
011303	optical instruments											optical instruments
011304	watch products											watch products
011401	heavy electrical equipment											heavy electrical equipment
011501	ship building											 ship building
011503	railway vehicle products											railway vehicle products

011509	other transport equipment products										other transport equipment products
011601	electric utility service										electric utility service
011603	city water service										city water service
011609	other electric/gas/water service										other electric/gas/water service
011704	tobacco products										tobacco products
020101	general coal mining										general coal mining
020109	other coal mining										other coal mining
020202	gravel digging										gravel digging
020209	other quarrying										other quarrying
020301	metal mining										metal mining
020302	petroleum mining										petroleum mining
020309	other mining										other mining
030101	hydroelectric plant construction work										hydroelectric plant construction work
030103	subway construction work										subway construction work
030104	railway construction work										railway construction work
030107	river civil engineering work										river civil engineering work
030108	sand collapse prevention civil engineering work										sand collapse prevention civil engineering work
030110	water supply/sewage construction work										water supply/sewage construction work
030111	port/seaside construction work										port/seaside construction work
040102	water transportation service										water transportation service
040103	airline service										airline service

040201	taxi service											taxi service
040202	bus service											bus service
040209	other passenger transport service											other passenger transport service
040302	specific truck transportation service											specific truck transportation service
040303	cargo/ light automobile transportation service											cargo/ light automobile transportation service
040409	other transportation service											other transportation service
050201	general harbor transportation service											general harbor transportation service
050209	other harbor transportation service											other harbor transportation service
060101	agriculture											agriculture
060201	lumbering											lumbering
060209	other forestry											other forestry
070101	livestock											livestock
080101	all kinds of wholesale											all kinds of wholesale
080102	furniture/fittings wholesale											furniture/fittings wholesale
080201	all kinds of retail											all kinds of retail
080203	furniture/fittings retail											furniture/fittings retail
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
090201	traveling service											traveling service

100102	movie theatre																						movie theatre
120101	auto mobile practical training																						auto mobile practical training
120102	software service																						software service
130301	bathhouse																						bathhouse
130309	other health and hygiene service																						other health and hygiene service
140209	other restaurants																						other restaurants
140302	park and amusement park																						park and amusement park
150104	cremation service																						cremation service
150105	livestock process service																						livestock process service
160101	public office																						public office
170101	dispatch service																						dispatch service
170201	security service																						security service
170202	information processing																						information processing
	service																						service
	total		47	48	44	29	27	22	19	21	15	17	31	18	17	16	14	14	14	11	18	442	total

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

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