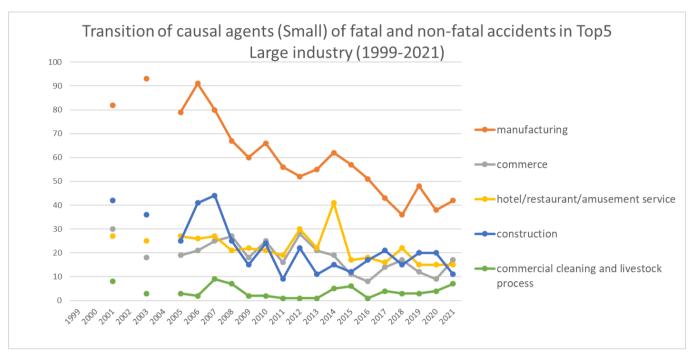
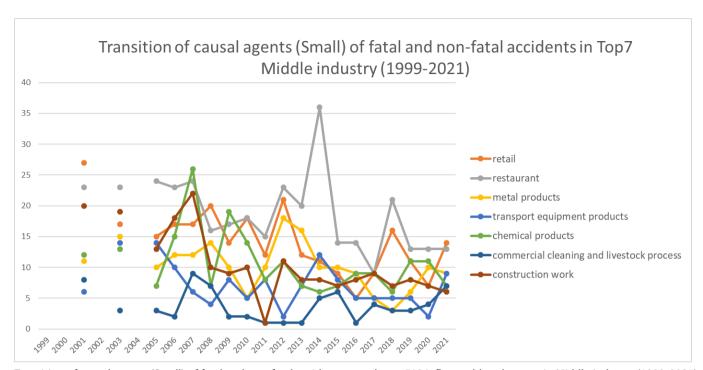
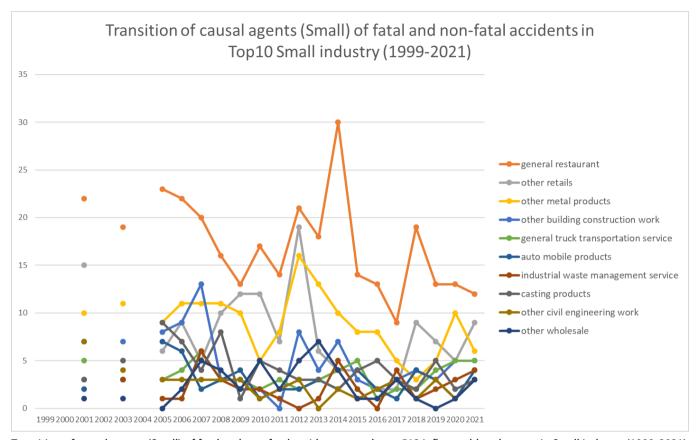
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 512 inflammable substance (1999-2021)



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 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			27		25		27	26	27	21	22	21	19	30	22	41	17	18	16	22	15	15	15	426	hotel/restaurant/amusement
	service					25			20																	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			Q		2		2	2	9	7	2	2	1	1	1	5	6	1	4	2	2	4	7	72	commercial cleaning and
	livestock process													'	<u> </u>	<u> </u>			<u> </u>						, 2	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		9			1	1															11	financial
	business/advertisement																						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 servic
0109	sand and stone products	4	3	7	1	1		1	2	1	1		4	1	1		1	2		4	34	sand and stone
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 wo
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 manufacturin
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 equipmer
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 facili
1201	education/research service	3	1	1	2		1	1		3			1							2	15	education/research
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
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

0804	other commerce		1		4	1	2	3	2	2	2	2	2	4	1	2	1		1	1	31	other commerce
1401	hotel		1		2	1		1	2	1	1	4	2	4	1	4	3	1			28	hotel
0107	printing/bookbinding		2	1	2	3	1			2	1		1		2		1				16	printing/bookbinding
0105	furniture		2		1	1	2		1		1	2	1	1					1		13	furniture
0901	financial business	Ġ	9			1	1														11	financial business
0106	pulp/paper processing products		2	1		1		1		1			3	1							10	pulp/paper processing products
0104	wood products			2	2	1	2								1		1				9	wood products
0402	road passenger transport service		2				2	1		1	1		1			1					9	road passenger transport service
0701	livestock		1		1							1	2			1	1	1			8	livestock
0102	textile products			1	1				1	1	1	1				1					7	textile products
0501	land cargo handling service		1	1									1	1	1	1					6	land cargo handling service
0103	fiber products		1	2										1							4	fiber products
0702	fishery							2				1	1								4	fishery
0202	quarrying		1																1	1	3	quarrying
0401	railroad/water transportation/airline service										1								2		3	railroad/water transportation/airline service
0502	harbor transportation service					1			1					1							3	harbor transportation service
1701	dispatch service		1						1										1		3	dispatch service
1303	other health and hygiene service									1		1									2	other health and hygiene service
0203	other mining			1																	1	other mining
0116	electric/gas/water service																					electric/gas/water

																							service
0201	coal mining																						coal mining
0404	other transportation service																						other transportation
0101	other transportation service																						service
0803	haircut/beauty salon																						haircut/beauty salon
0002	advertisement and mediator																						advertisement and
0,002	advertisement and mediator																						mediator
1101	telecommunication service																						telecommunication
1101	telecommunication service																						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)

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
140201	general restaurant			22		19		23	22	20	16	13	17	14	21	18	30	14	13	9	19	13	13	12	328	general restaurant
080209	other retails			15		3		6	9	5	10	12	12	7	19	6	4	4	2	2	9	7	5	9	146	other retails
011209	other metal products			10		11		9	11	11	11	10	5	8	16	13	10	8	8	5	3	5	10	6	170	other metal products
030209	other building construction work			7		7		8	9	13	3	3	2		8	4	7	3	2	3	4	3	5	5	96	other building construction work
040301	general truck transportation service			5		3		3	4	6	3	3	2	3	2	3	4	5	1	2	2	4	5	5	65	general truck transportation service
011502	auto mobile products			2		3		7	6	2	3	4	1	2	2	3	2	4	2	1	4	3	1	4	56	auto mobile products
150102	industrial waste management service			3		3		1	1	6	3	2	2	1		1	5	2		4	1	2	3	4	44	industrial waste management service
011002	casting products			3		5		9	7	4	8	1	5	4	3	3	2	4	5	3	2	5	2	3	78	casting products
030199	other civil engineering work			7		4		3	3	3	3	3	1	2	3		2	1	2	3	1	3	1	3	48	other civil engineering work
080109	other wholesale			1		1			2	5	4	2	5	2	5	7	4	1	1	3	1		1	3	48	other wholesale

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
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
	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
									i									ĺ					

140209 oth	ther foods lastics products ther restaurants etroleum/coal products		3 1	5	4	2	4													1	1	44	ather foods
140209 oth	ther restaurants		1					6	3	3		1	2	1	2	2	2		2		<u> </u>		other foods
010804 pe				6	1		5	3	1			1			2	1	3		3	3	1	31	plastics products
	etroleum/coal products		1	4	1	1	4		4	1	1	2	2	6		1		2			1	31	other restaurants
					1	1			8	5		1	4		1	1	2			1	1	26	petroleum/coal products
011403 tel	ectronics equipment and elecommunications oparatus		3		3		4	2		2		1			1	1	1			3	1	22	electronics equipment and telecommunications apparatus
011409 otł	ther electrical equipment		2	1	1		1	1	1	1	1			1	1	1	1				1	14	other electrical equipment
011109	ther nonferrous metal roducts			1		3		1			1		1	3				2			1	13	other nonferrous metal products
011303 ор	ptical instruments		1	1	1		2		1		1	1			2				1		1	12	optical instruments
060101 ag	griculture		1		2			2				2					2		1	1	1	12	agriculture
060201 lun	ımbering			1			1	2	1	1		1			1	1	1				1	11	lumbering
150101 bu	uilding maintenance service		3					1								1		1	1		1	8	building maintenance service
010902 gla	lass products		1		1					1	1			1							1	6	glass products
011201	restern tableware/cutting											1							1		1	3	western tableware/cutting tool products
130101 ho	ospital									1				1							1	3	hospital
130109	ther medical treatment ervice															1	1				1	3	other medical treatment service
160101 pu	ublic office																1				1	2	public office
100101	ovie production and elivery service																		52			52	movie production and delivery service
011709 otl	ther manufacturing		6	2	2	3		3		3	1	1	5	1	4	2	1	2		3		39	other manufacturing
030203	uilding facility construction ork		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		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			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
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

1-		 		 	 			 	 				 	 		 	·
010301	over/under wear		1													1	over/under wear
010402	plywood				1											1	plywood
010501	wood furniture						1									1	wood furniture
010702	bookbinding				1											1	bookbinding
010802	chemical fiber													1		1	chemical fiber
010809	chemical fertilizer products												1			1	chemical fertilizer products
010905	other ceramic products											1				1	other ceramic products
011202	screw products				1											1	screw products
011304	watch products										1					1	watch products
020209	other quarrying														1	1	other quarrying
020301	metal mining			1												1	metal mining
030102	tunnel construction work									1						1	tunnel construction work
030104	railway construction work		1													1	railway construction work
030111	port/seaside construction									1						1	port/seaside construction
030111	work									<u>'</u>						'	work
040102	water transportation service								1							1	water transportation service
040303	cargo/ light automobile			1												1	cargo/ light automobile
040303	transportation service																transportation service
050201	general harbor transportation							1								1	general harbor transportation
	service																service
070201	fishery										1					1	fishery
080203	furniture/fittings retail		1													1	furniture/fittings retail
090103	insurance business					1										1	insurance business
010201	silk-reeling																silk-reeling
010202	cotton-spinning																cotton-spinning
010203	weaving																weaving

010904	fire resisting products													fire resisting products
011503	railway vehicle products													railway vehicle products
011601	electric utility service													electric utility service
011602	city gas service													city gas 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
020201	quarrying													quarrying
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
040103	airline service													airline service
040209	other passenger transport service													other passenger transport service
040409	other transportation service													other transportation service
050209	other harbor transportation service													other harbor transportation service
080102	furniture/fittings wholesale													furniture/fittings wholesale
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 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																						information processing
170202	service																						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