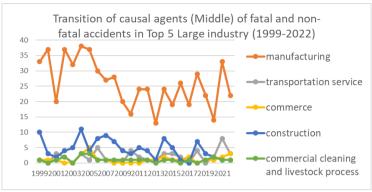
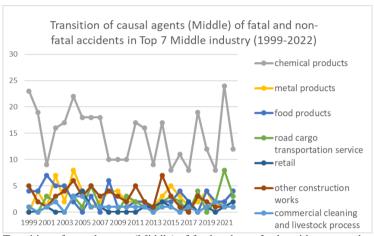
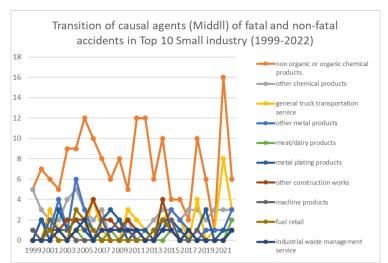
Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Large industry (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Middle Industry (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Middle Industry (1999-2022)

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Large industry (1999-2022)

	titoli of causar agents (whiche) of f														<u> </u>			1				1					10
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	2022	total	Large industry
01	manufacturing	33	37	20	37	32	38	37	30	27	28	20	16	24	24	13	24	19	26	19	29	22	14	33	22	624	manufacturing
04	transportation service	1		3	2		3	1	5	1	1		4	2	1	1	3	3	2		4		2	8	3	50	transportation service
08	commerce	1	1	1			3	5	1	1					1	1	2	1	1	2		1	1	2	3	28	commerce
03	construction	10	3	2	4	5	11	4	8	9	7	4	3	5	4	1	8	5	1		7	3	2	1	1	108	construction
15	commercial cleaning and livestock process	1		1	2		3	3	1	1	1	1	1	1	1		1	1		1		1	2	1	1	25	commercial cleaning and livestock process
17	others		1		1	3		3			2			1	1	1				1	1	2			1	18	others
12	education/research service	1						2		1		1									1			2		8	education/research service
14	hotel/restaurant/amusement service														1				1	1	1	1				5	hotel/restaurant/amusement service
05	cargo handling service					2		1			1															4	cargo handling service
13	health and hygiene service		1		1	1							1													4	health and hygiene service
07	livestock/fishery					1	1																			2	livestock/fishery
02	mining							1																		1	mining
06	agriculture																		1							1	agriculture
09	financial business/advertisement																										financial business/advertisement
10	movie/play service																										movie/play service
11	telecommunication service																										telecommunication service
16	public office																										public office
	total	47	43	27	47	44	59	57	45	40	40	26	25	33	33	17	38	29	32	24	43	30	21	47	31	878	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Middle industry (1999-2022)

code	Middle industry	1999	2000	2001	2002	2003	2004	2005	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Middle industry	

0108 chemical products 0112 metal products	23	19	9	16 7	17	22 8	18	18	18	10	10	10	17	16	9	17 3	8 5	11	8	19	12	8	24	12	68	chemical products metal products
0101 food products] 	14 14	7	5	5	2	14	3	1 2 -	6	1	1	2	2	1	2	2	4	2		4	2.	$\frac{ 2 }{ 2 }$	4 1 ₄	64	food products
0403 road cargo transportation service	1	Ť	3	2		3	1	5	1			3	2	1		2	3	2		1/4		2	0	2	46	road cargo
	1	<u> </u>]3		<u> </u>		1	1	1	<u> </u>	<u> </u>	3	12	1			3			-	1		0	2		transportation servi
0802 retail	-		1	-	-	3	4	1	1				<u> </u>	1	1	2	1	<u> </u>	2	-	1	<u> </u>	1	12	21	retail
0303 other construction works	5	2	1	3	4	6	3	5	3	4	3	2	5	2	1	7	3	1		3	2	1	1	1	68	other construction works
commercial cleaning and livestock process	1		1	2		3	3	1	1	1	1	1	1	1		1	1		1		1	2	1	1	25	commercial cleaniand livestock proc
0113 machine products	1		2	2	1		1		2	1		1	2			1	2			1				1	18	machine products
1702 others		1		1	2		3			2			1	1	1				1	1	2			1	17	others
0115 transport equipment products		1				3		2	1	1	1							1	1			1	3	1	16	transport equipment products
0801 wholesale	1	1					1											1				1	1	1	7	wholesale
0302 construction work	5	1		1	1	5	1	3	6	3	1	1		2		1	2			4	1	1			39	construction work
0114 electrical equipment products	1		1	1	1	1	2	4		4	1	1	1	1	2	1	2	2		1			1		28	electrical equipments
0111 nonferrous metal making	1	2		2	1		3	2	2	1					1			4	2	3			1		25	nonferrous metal making
0117 other manufacturing	1	3			2	1	2		1					1				1	2	2	1				17	other manufacturi
pulp/paper processing products	2	1		1		1	1							1					3	1		1			12	pulp/paper proces products
0109 sand and stone products				2			5		1	1															9	sand and stone products
education/research service	1						2		1		1									1			2		8	education/research service
0102 textile products		2		1	1						2														6	textile products
0110 steel making					2		1							2								1			6	steel making
1402 restaurant																		1	1	1	1				4	restaurant
0402 road passenger transport service												1			1	1									3	road passenger transport service
0501 land cargo handling service					1		1			1															3	land cargo handlin service
1302 social welfare facility		1			1							1													3	social welfare fac
0104 wood products											1	1													2	wood products
0701 livestock					1	1																			2	livestock
0103 fiber products		1																							1	fiber products
0105 furniture																					1				1	furniture
0202 quarrying							1																		1	quarrying
0301 civil engineering work			1																						1	civil engineering
0404 other transportation service										1															1	other transportation service
harbor transportation service					1																				1	harbor transportat

0601	agriculture																		1							1	agriculture
1303	other health and hygiene service				1																					1	other health and hygiene service
1401	hotel														1											1	hotel
	dispatch service					1																				1	dispatch service
0107	printing/bookbinding																										printing/bookbinding
0116	electric/gas/water service																										electric/gas/water service
0201	coal mining																										coal mining
0203	other mining																										other mining
0401	railroad/water transportation/airline service																										railroad/water transportation/airline service
0602	forestry																										forestry
	fishery																										fishery
0803	haircut/beauty salon																										haircut/beauty salon
0804	other commerce																										other commerce
0901	financial business																										financial business
0902	advertisement and mediator																										advertisement and mediator
1001	movie/play service																										movie/play service
1101	telecommunication service																										telecommunication service
1301	medical treatment service																										medical treatment service
1403	other amusement service																										other amusement service
160	public office																										public office
	total	47	43	27	47	44	59	57	45	40	40	26	25	33	33	17	38	29	32	24	43	30	21	47	31	878	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 32 chemical facilities in Middle industry (1999-2022)

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	2022	total	Small industry
010801	non organic or organic chemical products	5	7	6	5	9	9	12	10	8	6	8	5	12	12	6	10	4	4	2	10	6	1	16	6	179	non organic or organic chemical products
010899	other chemical products	5	3	2	2	4	5	3	2	3			2		1	2	3	3	2	3	3	2	3	3	3	59	other chemical products
040301	general truck transportation service	1		3	1		1	1	4	1			3	2	1		2	3	2		4		1	8	3	41	general truck transportation service
011209	other metal products		2	1	4	1	6	3	1		1	2	1			1	1	3	2	1		1	1	1	3	36	other metal products
010101	meat/dairy products			2	1		1				1		1					1							2	9	meat/dairy products
011204	metal plating products		2		3	1	2	1		2	3	2		1	1		2	2	1		1	3		1	1	29	metal plating products
030309	other construction works			1	1	2	2	2	4	2	2	1	2	1			4	1			1				1	27	other construction works
011301	machine products	1		2	1	1				2			1				1	2			1				1	13	machine products
080204	fuel retail			1			3	2	1							1	2	1		1					1	13	fuel retail
150102	industrial waste management				1		1	2		1	1	1	1	1			1	1		1					1	13	industrial waste management

service																										service
170209 others		1			2		2			1			1	1	1				1	1	1			1	13	others
010105 alcoholic drinks	1		2		1			1		2											1		1	1	10	alcoholic drinks
010809 chemical fertilizer products	1	1	İ		1	İ			1	1								3		1				1	10	chemical fertilizer products
010808 painting products		2					1	1	1										1				2	1	9	painting products
010802 chemical fiber	2	1		1		1																1		1	7	chemical fiber
080109 other wholesale	1	1					1											1				1	1	1	7	other wholesale
080209 other retails							1		1												1		1	1	5	other retails
010103 agricultural food products		2																						1	3	agricultural food products
011501 ship building										1														1	2	ship building
030302 machinery/apparatus setting work	5	2		2	2	4	1	1	1	2	1		4	2	1	3	2	1		2	2	1	1		40	machinery/apparatus setting work
010803 pharmaceuticals	4	1		2	2	6		1	3		2		1		1	3		1		2	2	2	1		34	pharmaceuticals
010804 petroleum/coal products	2	2	1	3				1		3		3	3	2		1	1	1		1	1		1		26	petroleum/coal products
010109 other foods	2	2	1	1	2			2		2	1		1	2		1	1	2	1		2	1	1		25	other foods
011109 other nonferrous metal products		1		2			3	2		1								4	1	2			1		17	other nonferrous metal products
010805 plastics products		1		2		1	2	3	2										1	1	1	1	1		16	plastics products
electronics equipment and telecommunications apparatus				1	1		1			2	1		1	1	1	1	1	2		1			1		15	electronics equipment and telecommunications apparatus
011502 auto mobile products		1				3		2	1		1							1	1			1	2		13	auto mobile products
011709 other manufacturing	1	3			1	1	2		1					1				1	1	1					13	other manufacturing
steel frame/reinforced 030201 concrete house construction work	1			1			1	1	3		1			2		1	1			1					13	steel frame/reinforced concrete house construction work
030209 other building construction work	2	1			1	3		1		1							1			1	1	1			13	other building construction work
030203 building facility construction work	2					2		1	2	2		1								2					12	building facility construction work
010106 soft drinks			1	2	1	1				1						1			1		1	1			10	soft drinks
010806 rubber products	3	1		1	1								1	1					1	1					10	rubber products
011409 other electrical equipment	1		1			1		3		2		1					1								10	other electrical equipment
010601 pulp/paper	2			1		1	1							1					1			1			8	pulp/paper
011101 nonferrous metals/rolling products	1	1			1				2						1				1	1						nonferrous metals/rolling products
other cleaning and livestock process service	1					2		1													1	2	1		8	other cleaning and livestock process service
120109 other education/research service	1						1		1		1									1			2		7	other education/research service
010901 cement products							5			1															6	cement products
011001 steel/iron/rolling products					2									2								1			5	steel/iron/rolling products
010102 fishery products			1	1	1													1							4	fishery products
010204 dyeing		2									2														4	dyeing
140201 general restaurant																		1	1	1	1				4	general restaurant

			-		=			-						=			=		=	_		=		-		
170201 security service				1			1			1											1				4	security service
010104 bread/cake products	1												1					1							3	bread/cake products
010602 paper processing products		1																	2						3	paper processing products
011401 heavy electrical equipment							1	1							1										3	heavy electrical equipment
040202 bus service												1			1	1									3	bus service
040302 specific truck transportation service						2		1																	3	specific truck transportation service
050101 land cargo handling service					1		1			1															3	land cargo handling service
080201 all kinds of retail							1							1					1						3	all kinds of retail
130201 social welfare facility		1			1							1													3	social welfare facility
150103 other waste disposal service			1				1							1											3	other waste disposal service
010209 other textile products				1	1																				2	other textile products
010402 plywood											1	1													2	plywood
010909 other sand and stone products				1					1																2	other sand and stone products
011202 screw products	İ	İ								İ	İ		1				i		ΪΠ	1		İ			2	screw products
011303 optical instruments				1						1									i						2	optical instruments
011305 other precision machine products													2												2	other precision machine products
011702 machine repair	İ	İ			1					İ							i		1						2	machine repair
011703 cleaning	i	İ								İ									i	1	1				2	cleaning
040309 other land cargo transportation service				1																		1			2	other land cargo transportation service
070101 livestock					1	1																			2	livestock
010309 other fiber products		1															İ		ī						1	other fiber products
010502 metal furniture																					1				1	metal furniture
010609 other pulp/paper processing products																				1					1	other pulp/paper processing products
010807 leather products	1	İ					İ			İ	İ								İΠ						1	leather products
010902 glass products	İ	İ		1						İ	İ														1	glass products
011009 other steel products	İ	İ					1			İ	İ	İ							İ						1	other steel products
011203 metal press products		İ								İ	İ	1													1	metal press products
011302 measuring instruments							1			İ									İ						1	measuring instruments
011509 other transport equipment products																							1		1	other transport equipment products
020201 quarrying	İ	Ï					1	i		Ï	İ								i i i						1	quarrying
030110 water supply/sewage construction work			1																						1	water supply/sewage construction work
030202 wooden house construction work									1																1	wooden house construction work
030301 electricity/telecommunication work											1														1	electricity/telecommunication work
040409 other transportation service										1															1	other transportation service
general harbor transportation					1																				1	general harbor transportation

service																service
060101 agriculture										1					1	agriculture
120102 software service				1											1	software service
130301 bathhouse		1				$\overline{\Box}$								T	1	bathhouse
140101 hotel								1							1	hotel
150101 building maintenance service		1				$\overline{\Box}$									1	building maintenance service
170101 dispatch service			1												1	dispatch service
010201 silk-reeling						$\overline{\Box}$									$\overline{}$	silk-reeling
010202 cotton-spinning															$\overline{}$	cotton-spinning
010203 weaving															\Box	weaving
010301 over/under wear																over/under wear
010401 lumbering																lumbering
010409 other lumber and wood products																other lumber and wood products
010501 wood furniture																wood furniture
010503 fittings																fittings
010509 other furniture																other furniture
010701 printing service																printing service
010702 bookbinding																bookbinding
010709 other printing and bookbinding																other printing and bookbinding
010903 pottery products																pottery products
010904 fire resisting products																fire resisting products
010905 other ceramic products																other ceramic products
011002 casting products																casting products
011102 nonferrous metals casting products																nonferrous metals casting products
011201 western tableware/cutting tool products																western tableware/cutting tool products
011304 watch products																watch products
011402 electrical appliance																electrical appliance
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
011701 auto mobile servicing																auto mobile servicing
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
												<u> </u>		<u> </u>		

020301 metal mining													metal mining
020302 petroleum mining													petroleum mining
020309 other mining													other mining
030101 hydroelectric plant construction work													hydroelectric plant construction work
030102 tunnel construction work													tunnel construction work
030103 subway construction work													subway construction work
030104 railway construction work													railway construction work
030105 bridge construction work													bridge construction work
030106 road construction work													road construction work
030107 river civil engineering work													river civil engineering work
030108 sand collapse prevention civil engineering work													sand collapse prevention civil engineering work
030109 land consolidation civil engineering work													land consolidation civil engineering work
030111 port/seaside construction work													port/seaside construction work
030199 other civil engineering work													other civil engineering work
040101 railroad service													railroad service
040102 water transportation service													water transportation service
040103 airline service													airline service
040201 taxi service													taxi service
040209 other passenger transport service													other passenger transport service
040303 cargo/ light automobile transportation service													cargo/ light automobile transportation service
050202 port cargo handling service													port cargo handling service
050209 other harbor transportation service													other harbor transportation service
060201 lumbering													lumbering
060209 other forestry													other forestry
070201 fishery													fishery
070209 other fishery													other fishery
080101 all kinds of wholesale													all kinds of wholesale
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
080401 warehousing													warehousing
080409 other commerce													other commerce
090101 banking/trust business													banking/trust business
stock/commodity trade													stock/commodity trade

090102 business																										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
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
120101 auto mobile practical training	5																									auto mobile practical training
130101 hospital																										hospital
[130102] general clinic																										general clinic
other medical treatment service																										other medical treatment service
other health and hygiene service																										other health and hygiene service
140209 other restaurants																										other restaurants
140301 golf course																										golf course
140302 park and amusement park																										park and amusement park
140309 other amusement service																										other amusement service
150104 cremation service																										cremation service
150105 livestock process service																										livestock process service
160101 public office																										public office
170202 information processing service																										information processing service
total	47	43	27	47	44	59	57	45	40	40	26	25	33	33	17	38	29	32	24	43	30	21	47	31	878	total

Data source: https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html (MHLW, Japan)

https://www.jisha.or.jp/english/statistics/202311_12.html