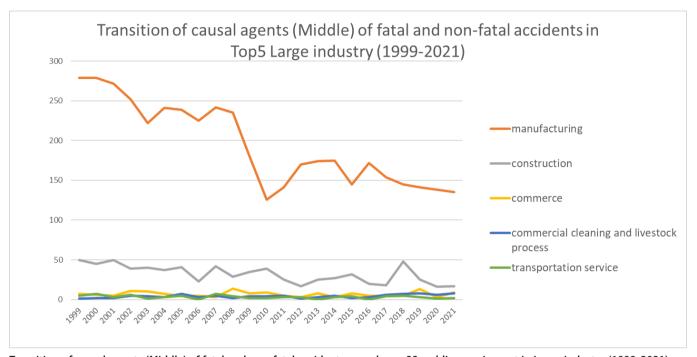
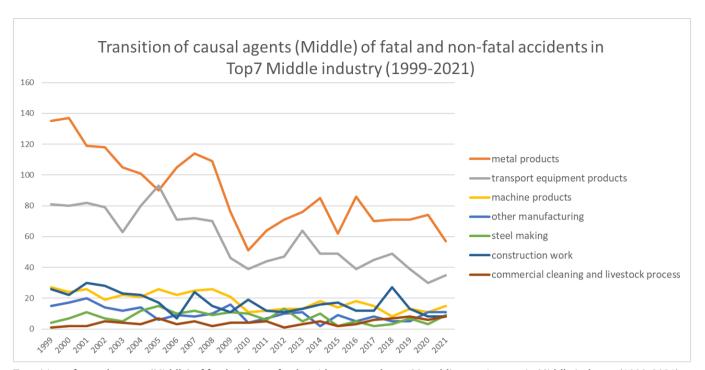
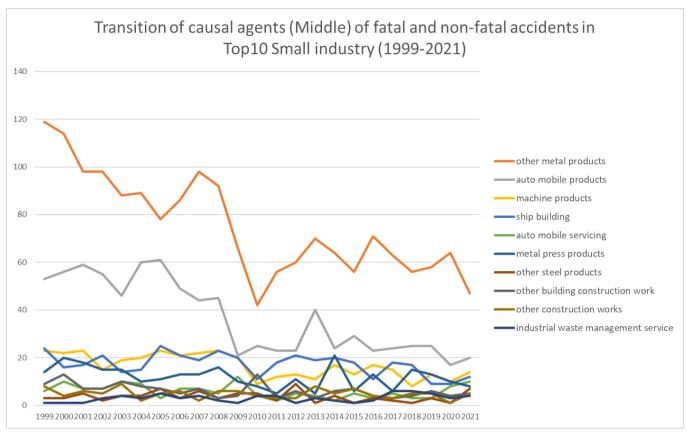
Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment in Large industry (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment in Middle Industry (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment in Small Industry (1999-2021)

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment 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	279	279	272	252	222	241	239	225	242	235	180	126	141	170	174	175	145	172	154	145	141	138	135	4,482	manufacturing
03	construction	50	45	50	39	40	37	41	23	42	29	35	39	25	17	25	27	32	20	18	48	25	16	17	740	construction
08	commerce	7	6	5	11	10	7	4	5	3	14	8	9	5	3	8	3	8	5	4	5	13	3	9	155	commerce
15	commercial cleaning and livestock process	1	2	2	5	4	3	7	3	5	2	4	4	5	1	3	5	2	3	6	7	8	6	8	96	commercial cleaning and livestock process
04	transportation service	5	7	3	6	1	3	5		7	4	2	2	3	3		3	4		4	5	3	1	2	73	transportation service
17	others	4	2	6	4	2	6	5	2	2	2	4	2	1	2	1	2	1	5	1	2	1		1	58	others
02	mining	6	1	1	1	1		2	1			1		1		1	1						2	1	20	mining

07	livestock/fishery	1	1		1	1	2					1	1	1		2	1				1			1	14	livestock/fishery
14	hotel/restaurant/amusement service			3				1	1										1			1		1	8	hotel/restaurant/amusement service
05	cargo handling service			1	3	1		1			1				1		1					3			12	cargo handling service
09	financial business/advertisement	1	1																				2		4	financial business/advertisement
06	agriculture												1								1				2	agriculture
11	telecommunication service								1					1											2	telecommunication service
12	education/research service	1																1							2	education/research service
13	health and hygiene service																		1			1			2	health and hygiene service
10	movie/play service																									movie/play service
16	public office																									public office
	total	355	344	343	322	282	299	305	261	301	287	235	184	183	197	214	218	193	207	187	214	196	168	175	5,670	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment 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	135	137	119	118	105	101	90	105	114	109	76	51	64	71	76	85	62	86	70	71	71	74	57	2,047	metal products
0115	transport equipment products	81	80	82	79	63	80	93	71	72	70	46	39	44	47	64	49	49	39	45	49	39	30	35	1,346	transport equipment products
0113	machine products	27	24	26	19	22	21	26	22	25	26	21	11	12	13	13	18	14	18	15	8	13	11	15	420	machine products
0117	other manufacturing	15	17	20	14	12	14	6	9	8	10	16	4	7	10	11	2	9	5	8	5	5	11	11	229	other manufacturing
0110	steel making	4	7	11	7	5	12	15	10	12	9	11	10	6	13	5	10	2	5	2	3	7	3	9	178	steel making
0302	construction work	26	22	30	28	23	22	17	7	24	15	11	19	12	11	13	16	17	12	12	27	13	8	8	393	construction work
1501	commercial cleaning and livestock process	1	2	2	5	4	3	7	3	5	2	4	4	5	1	3	5	2	3	6	7	8	6	8	96	commercial cleaning and livestock process
																										other construction

0303	other construction works	11	13	14	8	10	7	14	12	8	11	16	16	9	4	12	8	12	6	4	16	9	3	5	228	works
0301	civil engineering work	13	10	6	3	7	8	10	4	10	3	8	4	4	2		3	3	2	2	5	3	5	4	119	civil engineering work
0114	electrical equipment products	6	5	5	8	7	6	4	5	6	7	1	4	4	8	3	6	3	5	7	1	1	3	4	109	electrical equipment products
0802	retail	4	2	3	7	4	3	1	3	1	9	4	1	2		5	1	6	5		2	6	3	4	76	retail
0801	wholesale	3	4	1	2	4	3	3	1	2	5	2	7	3	1	2	2			3	2	4		3	57	wholesale
0403	road cargo transportation service	3	3	3	4	1	3	3		7	3	2	1	1	2		2	3		3	5	1	1	2	53	road cargo transportation service
0109	sand and stone products	2	4	3	5	4		3	1	1	2	2	1	1	1		2	4	2	1	3	3	3	2	50	sand and stone products
0804	other commerce			1	2	2	1		1			2	1		2	1		2		1	1	3		2	22	other commerce
1702	others	3	1	5	4	2	6	5	2	1	2	3	2	1			2	1	4		2			1	47	others
0202	quarrying	6	1	1	1	1		2	1			1		1		1	1						2	1	20	quarrying
0105	furniture		1	1	2				2	2		1	1					2	3	2				1	18	furniture
0701	livestock	1	1		1	1	1					1	1			2	1				1			1	12	livestock
0104	wood products						1					2			1					2				1	7	wood products
1402	restaurant																		1			1		1	3	restaurant
0108	chemical products	6		1			3	1					3		1		1		4	1	4		2		27	chemical products
0111	nonferrous metal making	1	3	1		1	1			1		2	1	1	4	1	1		4			1			23	nonferrous metal making
0101	food products	2		2		2	1			1	1	2	1	1	1										14	food products
0402	road passenger transport service	2	3		1						1		1	1	1			1				2			13	road passenger transport service
1701	dispatch service	1	1	1						1		1			2	1			1	1		1			11	dispatch service
0501	land cargo handling service			1	2	1											1					2			7	land cargo handling service
0102	textile products		1			1					1								1			1	1		6	textile products

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0401	railroad/water transportation/airline service		1		1			1					1			1			1				6	railroad/water transportation/airline service
0107	printing/bookbinding			1			1	1								1				1			5	printing/bookbinding
0502	harbor transportation service				1			1			1			1							1		5	harbor transportation service
1403	other amusement service			2				1	1														4	other amusement service
0902	advertisement and mediator	1	1																			1	3	advertisement and mediator
0103	fiber products												1						1				2	fiber products
0702	fishery						1						1										2	fishery
1101	telecommunication service								1				1										2	telecommunication service
1201	education/research service	1															1						2	education/research service
0106	pulp/paper processing products														1								1	pulp/paper processing products
0404	other transportation service							1															1	other transportation service
0601	agriculture																			1			1	agriculture
0602	forestry											1											1	forestry
0901	financial business																					1	1	financial business
1301	medical treatment service																	1					1	medical treatment service
1302	social welfare facility																				1		1	social welfare facility
1401	hotel			1																			1	hotel

0116	electric/gas/water service																									electric/gas/water
0110	electric/gas/water service																									service
0201	coal mining																									coal mining
0203	other mining																									other mining
0803	haircut/beauty salon																									haircut/beauty salon
1001	movie/play service																									movie/play service
1303	other health and hygiene service																									other health and
1303	other health and hygiene service																									hygiene service
1601	public office																									public office
	total	355	344	343	322	282	299	305	261	301	287	235	184	183	197	214	218	193	207	187	214	196	168	175	5,670	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment 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	119	114	98	98	88	89	78	86	98	92	66	42	56	60	70	64	56	71	63	56	58	64	47	1,733	other metal products
011502	auto mobile products	53	56	59	55	46	60	61	49	44	45	21	25	23	23	40	24	29	23	24	25	25	17	20	847	auto mobile products
011301	machine products	23	22	23	15	19	20	23	21	22	23	20	9	12	13	11	17	13	17	15	8	13	10	14	383	machine products
011501	ship building	24	16	17	21	14	15	25	21	19	23	20	11	18	21	19	20	18	11	18	17	9	9	12	398	ship building
011701	auto mobile servicing	6	10	7	7	10	9	3	7	7	5	12	4	2	5	4	2	5	3	5	3	3	8	10	137	auto mobile servicing
011203	metal press products	14	20	18	15	15	10	11	13	13	16	10	8	5	11	5	21	6	13	6	15	13	10	8	276	metal press products
011009	other steel products	3	3	5	2	4	4	7	3	6	3	5	5	2	9	1	4	1	3	2	1	3	1	7	84	other steel products
030209	other building construction work	9	13	7	7	10	8	7	5	7	3	4	13	3	6	3	6	7	4	3	4	6	4	5	144	other building construction work
030309	other construction works	8	4	6	5	9	2	5	6	2	6	6	4	3	3	8	5	7	4	3	5	5	1	5	112	other construction works
150102	industrial waste management service	1	1	1	3	4	3	5	3	4	2	1	4	4	1	3	2	1	2	6	6	5	3	4	69	industrial waste management service
	steel frame/reinforced																									steel frame/reinforced

	concrete house construction work	12	6	18	16	10	8	7	2	15	7	4	4	4	5	9	9	10	5	6	21	4	1	3	186	concrete house construction work
011509	other transport equipment products	4	7	5	3	3	4	5	1	7	2	5	2	3	3	5	3	2	5	3	6	5	3	3	89	other transport equipment products
080109	other wholesale	2	4	1	2	4	3	3	1	2	5	2	6	3	1	2	2			3	2	4		3	55	other wholesale
011403	electronics equipment and telecommunications apparatus		1	1	2		1	1			2	1			2	2	1			1			1	3	19	electronics equipment and telecommunications apparatus
040301	general truck transportation service	3	2	2	4		3	3		7	3	2	1	1	2		2	2		2	4	1	1	2	47	general truck transportation service
080209	other retails	3	1	3	5	2	2	1		1	4	2	1	1		2		5	3		2	3	3	2	46	other retails
080409	other commerce			1	1	2	1		1			2	1		2			2		1	1	2		2	19	other commerce
150103	other waste disposal service		1	1	2			1				1		1			2	1	1		1	3	2	2	19	other waste disposal service
011001	steel/iron/rolling products	1	4	5	3		6	7	5	4	4	3	3	3	3	3	3		1		2	1	2	1	64	steel/iron/rolling products
030199	other civil engineering work	6	4	5	3	2	3	5	2	8	1	4	2	3	1		2	2	2	2	3	1	2	1	64	other civil engineering work
170209	others	3	1	5	4	2	6	5	2	1	2	2	2	1			2	1	4		2			1	46	others
011702	machine repair	3	5	10	3	1		2	1		2	2		2	2	4		2	2	1			1	1	44	machine repair
011305	other precision machine products	4	1	3	4	2		3	1	3	2	1	1			2	1	1					1	1	31	other precision machine products
010901	cement products	1	1	2	4	2		2	1	1	2	1	1		1		1	1	1		3	2	2	1	30	cement products
011002	casting products			1	2	1	2	1	2	2	2	3	2	1	1	1	3	1	1			3		1	30	casting products
011401	heavy electrical equipment	2	1	2	1		2		1	3	1		2	1			3			2				1	22	heavy electrical equipment
080202	auto mobile retail		1		1	2	1		1		3	2		1		2	1		1			3		1	20	auto mobile retail
020201	quarrying	5	1	1	1	1		2	1			1		1		1	1						1	1	18	quarrying
010502	metal furniture		1	1	2				1	1		1	1					2	3	1				1	15	metal furniture
030106	road construction work	3	3			1	3	1				2						1						1	15	road construction work
011201	western tableware/cutting	2	1	1	2	1	1	1		1			1			1				1				1	14	western tableware/cutting

	tool products																									tool products
011204	metal plating products		2	2			1		5	1														1	12	metal plating products
070101	livestock	1	1		1	1	1					1	1			2	1				1			1	12	livestock
030110	water supply/sewage construction work		2	1		2			1				1										1	1	9	water supply/sewage construction work
080204	fuel retail	1			1				2		2					1			1					1	9	fuel retail
010902	glass products		2					1									1					1	1	1	7	glass products
030109	land consolidation civil engineering work	1								2			1	1							1			1	7	land consolidation civil engineering work
150101	building maintenance service									1		2												1	4	building maintenance service
150109	other cleaning and livestock process service							1									1						1	1	4	other cleaning and livestock process service
140201	general restaurant																		1			1		1	3	general restaurant
010409	other lumber and wood products						1																	1	2	other lumber and wood products
030302	machinery/apparatus setting work	3	6	5	3		3	6	5	3	4	9	12	5	1	3	2	5	2	1	1	3	1		83	machinery/apparatus setting work
011409	other electrical equipment	4	3	1	4	5	3	3	3	3	3		2	3	5		1	1	3	1	1	1	2		52	other electrical equipment
030203	building facility construction work	5	2	3	4	3	5	2		2	4	3	2	3			1		2	2	2	2	3		50	building facility construction work
011709	other manufacturing	6	2	3	4	1	5	1	1	1	3	2		3	2	3		2		2	2	2	2		47	other manufacturing
030301	electricity/telecommunication work		3	3		1	2	3	1	3	1	1		1		1	1				10	1	1		33	electricity/telecommunication work
010805	plastics products	5		1			1	1					2						2	1	2		2		17	plastics products
011402	electrical appliance			1	1	2			1		1				1	1	1	2	2	3					16	electrical appliance
011109	other nonferrous metal products	1		1			1			1		2		1	3	1			3			1			15	other nonferrous metal products

030202	wooden house construction work		1	2	1		1	1			1			2		1			1	1		1		13	wooden house construction work
011202	screw products				3	1			1	1	1			3					2					12	screw products
011503	railway vehicle products		1	1			1	2		2			1				2				1		1	12	railway vehicle products
010909	other sand and stone products	1			1	2						1		1				3	1	1				11	other sand and stone
170101	dispatch service	1	1	1						1		1			2	1			1	1		1		11	dispatch service
040202	bus service	2	2										1	1	1							1		8	bus service
010109	other foods	2		1						1		2		1										7	other foods
030111	port/seaside construction work	1						3	1						1							1		7	port/seaside construction work
050101	land cargo handling service			1	2	1											1					2		7	land cargo handling service
010209	other textile products		1								1								1			1	1	5	other textile products
010899	other chemical products						1						1		1						2			5	other chemical products
030105	bridge construction work	1					1				1	1									1			5	bridge construction work
040201	taxi service		1		1						1							1				1		5	taxi service
011101	nonferrous metals/rolling products		2										1		1									4	nonferrous metals/rolling products
011102	nonferrous metals casting products		1			1											1		1					4	nonferrous metals casting products
011302	measuring instruments		1			1							1						1					4	measuring instruments
030102	tunnel construction work	1	1			1	1																	4	tunnel construction work
050202	port cargo handling service							1			1				1							1		4	port cargo handling service
010402	plywood											1								2				3	plywood
010701	printing service						1	1													1			3	printing service
010809	chemical fertilizer products	1					1												1					3	chemical fertilizer products
	hydroelectric plant																								hydroelectric plant

030101	construction work										1										2	3	construction work
030104	railway construction work					1				1										1		3	railway construction work
040102	water transportation service		1													1		1				3	water transportation service
040302	specific truck transportation service			1													1		1			3	specific truck transportation service
040309	other land cargo transportation service		1			1												1				3	other land cargo transportation service
080401	warehousing				1										1					1		3	warehousing
090209	other advertisement and mediator	1	1																		1	3	other advertisement and mediator
010106	soft drinks						1			1												2	soft drinks
010309	other fiber products												1					1				2	other fiber products
010401	lumbering										1			1								2	lumbering
010509	other furniture								1									1				2	other furniture
011303	optical instruments						1			1												2	optical instruments
020202	gravel digging	1																			1	2	gravel digging
030107	river civil engineering work							1								1						2	river civil engineering work
040101	railroad service				1			1														2	railroad service
070209	other fishery						1						1									2	other fishery
080101	all kinds of wholesale	1										1										2	all kinds of wholesale
110101	telecommunication service								1				1									2	telecommunication service
120109	other education/research service	1															1					2	other education/research
140301	golf course			1				1														2	golf course
010101	meat/dairy products											1										1	meat/dairy products
010102	fishery products													1								1	fishery products

010103	agricultural food products		1																1	agricultural food products
010104	bread/cake products				1														1	bread/cake products
010105	alcoholic drinks				1														1	alcoholic drinks
010204	dyeing				1														1	dyeing
010501	wood furniture						1												1	wood furniture
010609	other pulp/paper processing products											1							1	other pulp/paper processing products
010702	bookbinding												1						1	bookbinding
010709	other printing and bookbinding		1																1	other printing and bookbinding
010801	non organic or organic chemical products												1						1	non organic or organic chemical products
010806	rubber products														1				1	rubber products
010903	pottery products		1																1	pottery products
010904	fire resisting products	1																	1	fire resisting products
011703	cleaning										1								1	cleaning
040103	airline service									1									1	airline service
040409	other transportation service					1													1	other transportation service
050209	other harbor transportation service			1															1	other harbor transportation service
060101	agriculture															1			1	agriculture
060209	other forestry								1										1	other forestry
080201	all kinds of retail													1					1	all kinds of retail
090103	insurance business																	1	1	insurance business
130101	hospital														1				1	hospital
130201	social welfare facility																1		1	social welfare facility
140101	hotel		1																1	hotel

140302 park and amusement park					1									1	park and amusement park
140309 other amusement service		1												1	other amusement service
170201 security service							1							1	security service
010201 silk-reeling															silk-reeling
010202 cotton-spinning															cotton-spinning
010203 weaving															weaving
010301 over/under wear															over/under wear
010503 fittings															fittings
010601 pulp/paper															pulp/paper
010602 paper processing products															paper processing products
010802 chemical fiber															chemical fiber
010803 pharmaceuticals															pharmaceuticals
010804 petroleum/coal products															petroleum/coal products
010807 leather products															leather products
010808 painting products															painting products
010905 other ceramic products															other ceramic products
011304 watch products															watch products
011601 electric utility service															electric utility service
011602 city gas service															city gas service
011603 city water service															city water service
other electric/gas/water 011609 service															other electric/gas/water
011704 tobacco products															tobacco products
												<u> </u>			
020101 general coal mining															general coal mining
020109 other coal mining															other coal mining
020209 other quarrying															other quarrying

020301	metal mining														metal mining
020302	petroleum mining		Ì												petroleum mining
020309	other mining														other mining
030103	subway construction work														subway construction work
030108	sand collapse prevention civil engineering work														sand collapse prevention civil engineering work
040209	other passenger transport service														other passenger transport service
040303	cargo/ light automobile transportation service														cargo/ light automobile transportation service
050201	general harbor transportation service														general harbor transportation service
060201	lumbering														lumbering
070201	fishery														fishery
080102	furniture/fittings wholesale														furniture/fittings wholesale
080203	furniture/fittings retail														furniture/fittings retail
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
090109	other financial business														other financial business
090201	traveling service														traveling service
100101	movie production and delivery service														movie production and delivery service
100102	movie theatre														movie theatre
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100109	other movie/play service																									other movie/play service
120101	auto mobile practical training																									auto mobile practical training
120102	software service																									software service
130102	general clinic																									general clinic
130109	other medical treatment																									other medical treatment
																										-
130301	bathhouse																									bathhouse
120200	other health and hygiene																									other health and hygiene
130309	service																									service
140209	other restaurants																									other restaurants
150104	cremation service																									cremation service
150105	livestock process service																									livestock process service
160101	public office																									public office
170202	information processing																									information processing
	service																									service
	total	355	344	343	322	282	299	305	261	301	287	235	184	183	197	214	218	193	207	187	214	196	168	175	5,670	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