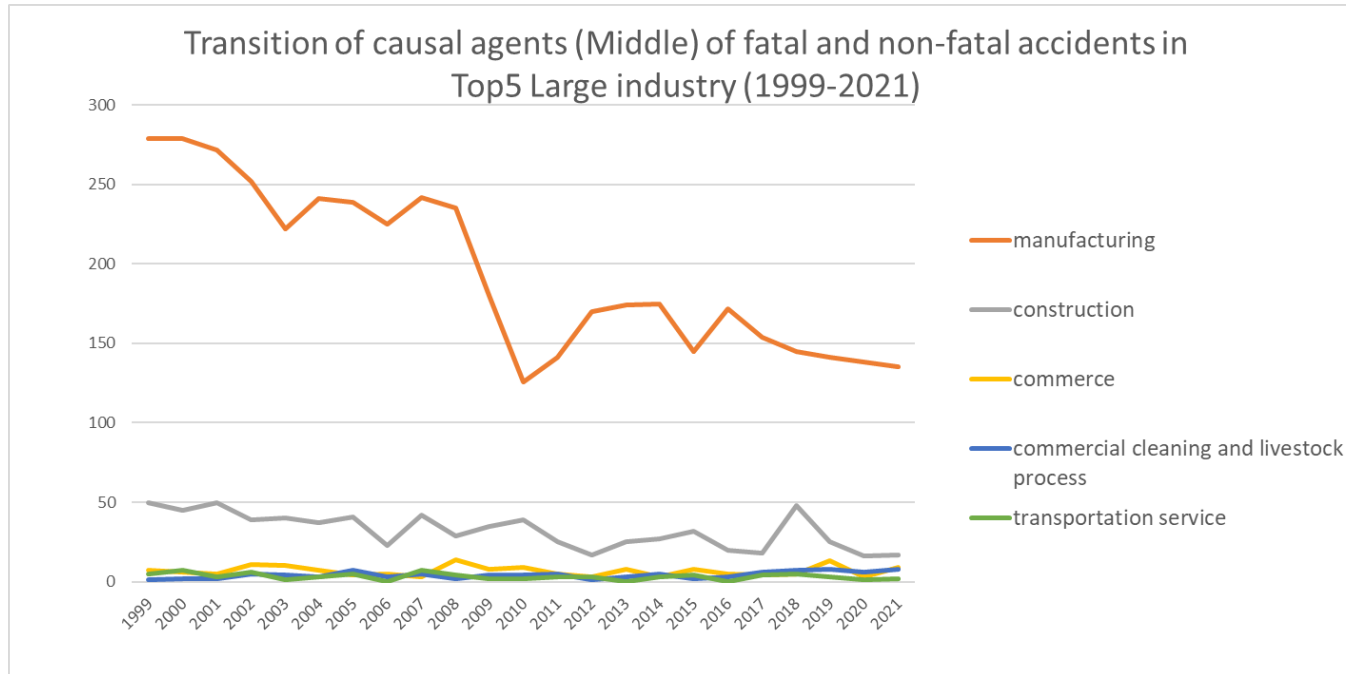
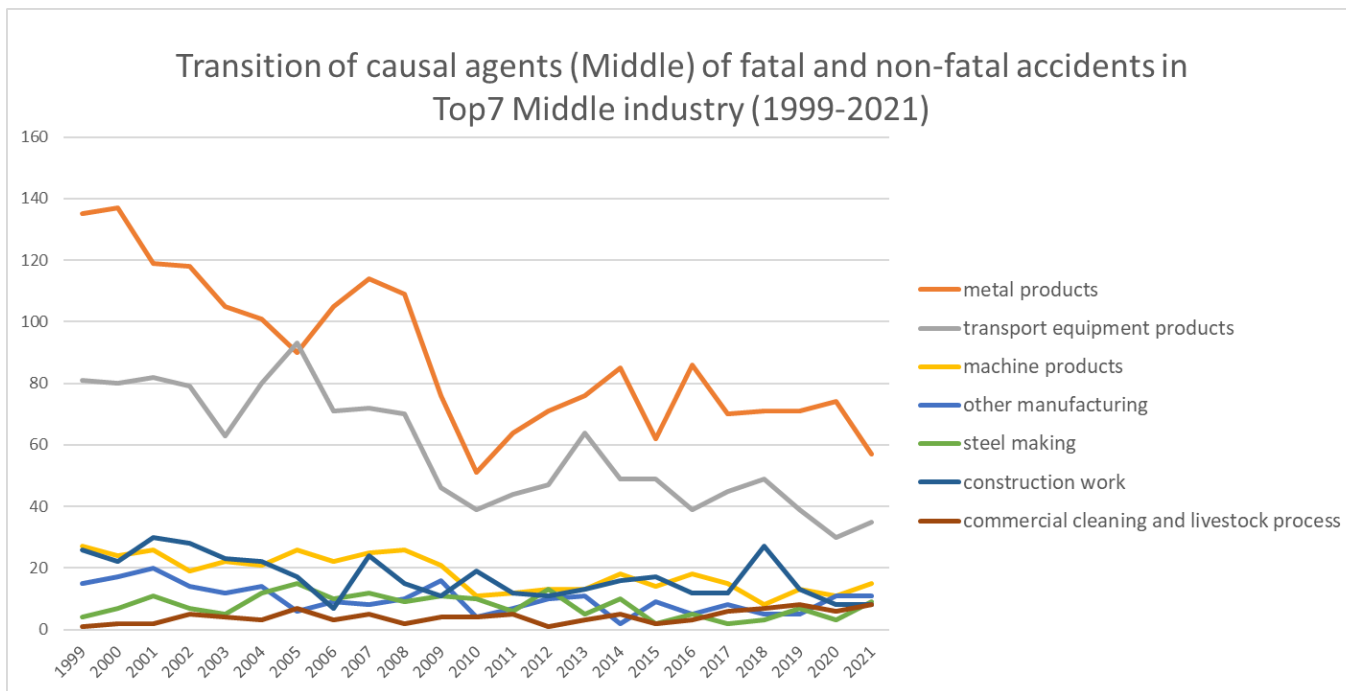


Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment (1999-2021)

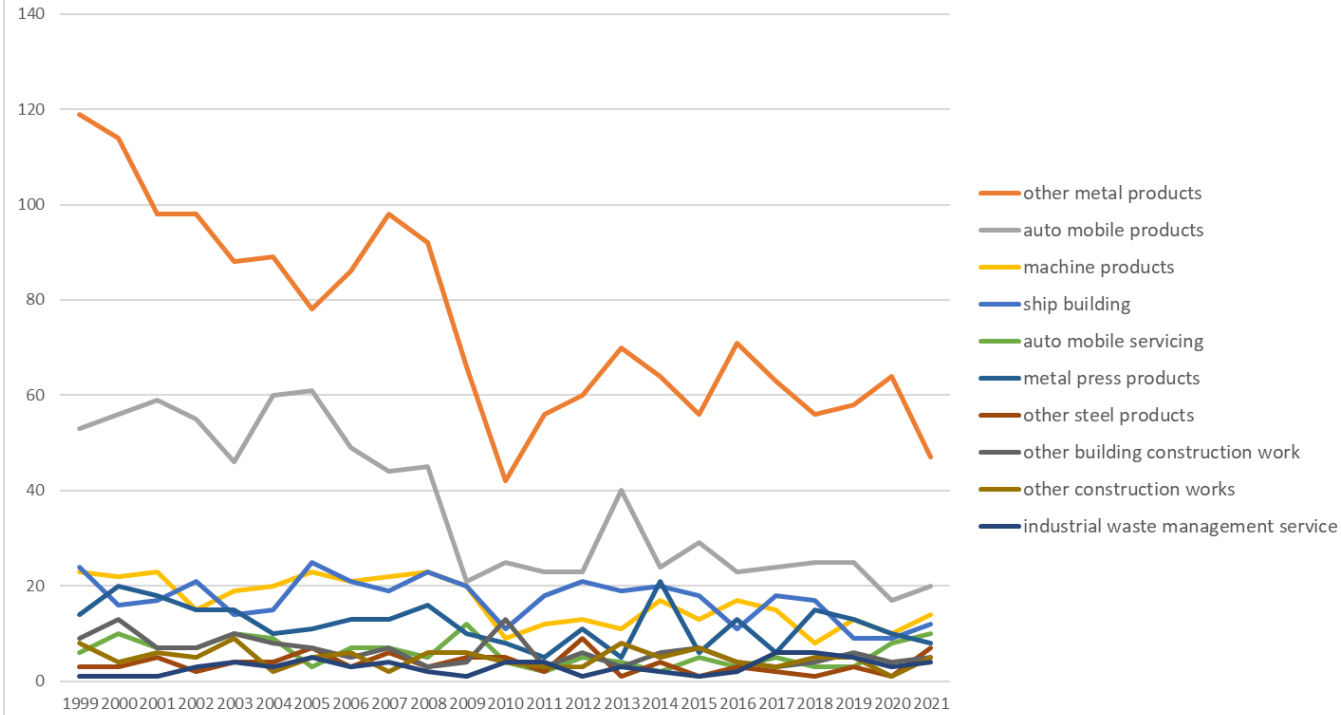


Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 33 welding equipment in Large industry (1999-2021)



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 in Top10 Small 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

030201	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	14	western tableware/cutting

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									3	water transportation service
040302	specific truck transportation service			1											1								3	specific truck transportation service
040309	other land cargo transportation service		1			1																	3	other land cargo transportation service
080401	warehousing				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									2	other fiber products
010401	lumbering										1			1									2	lumbering
010509	other furniture						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																					2	other education/research service
140301	golf course			1				1															2	golf course
010101	meat/dairy products														1								1	meat/dairy products
010102	fishery products															1							1	fishery products

