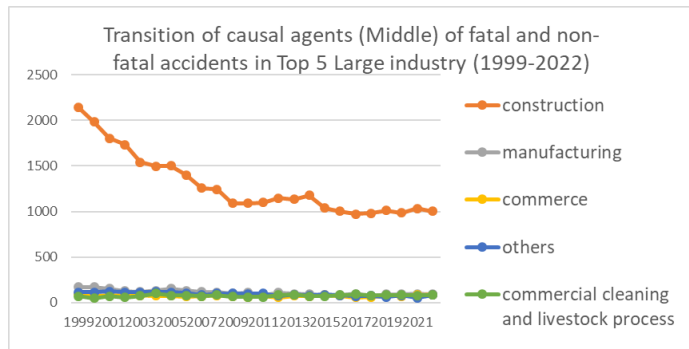
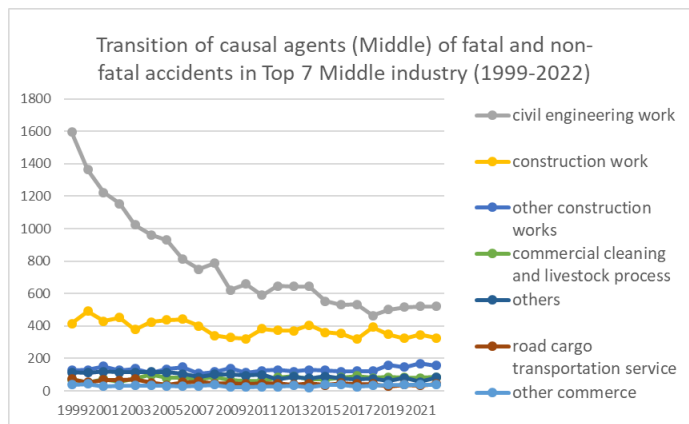


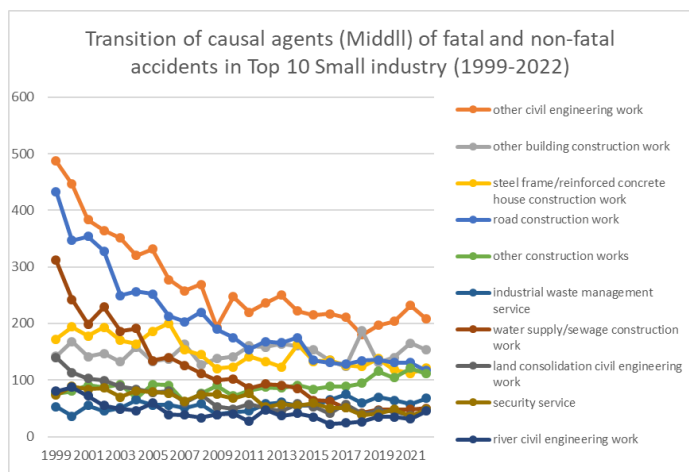
Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine in Large industry (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine in Middle Industry (1999-2022)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine in Middle Industry (1999-2022)

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine in Large industry (1999-2022)



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
03	construction	2,139	1,984	1,804	1,734	1,540	1,499	1,503	1,400	1,257	1,245	1,089	1,092	1,098	1,148	1,133	1,176	1,040	1,003	973	981	1,010	984	1,035	1,004	30,871	construction
01	manufacturing	173	170	154	128	118	134	152	133	120	115	102	112	81	110	99	91	80	86	96	77	94	94	99	94	2,712	manufacturing
08	commerce	92	75	83	79	79	74	74	65	70	81	69	60	73	58	74	70	85	76	57	62	72	73	83	88	1,772	commerce
17	others	116	113	123	116	115	118	114	105	86	103	102	95	100	74	87	78	89	79	70	74	64	81	55	84	2,241	others
15	commercial cleaning and livestock process	70	50	72	59	76	100	81	79	73	85	66	61	63	82	89	71	71	83	93	79	86	83	79	84	1,835	commercial cleaning and livestock process
04	transportation service	76	58	69	67	74	53	42	59	65	46	53	43	49	48	44	48	39	53	45	47	32	41	38	47	1,236	transportation service
06	agriculture	50	27	39	47	39	47	45	42	41	41	44	39	49	58	51	40	41	42	30	35	42	30	47	29	995	agriculture
02	mining	69	48	80	35	42	36	56	36	35	24	30	33	22	24	32	27	23	18	25	29	22	28	29	25	828	mining
14	hotel/restaurant/amusement service	16	22	27	21	13	23	24	15	23	19	23	14	19	15	24	15	14	20	6	12	13	15	12	18	423	hotel/restaurant/amusement service
07	livestock/fishery	17	7	10	9	8	18	11	13	6	7	9	13	16	17	10	13	13	9	14	16	16	15	15	18	300	livestock/fishery
05	cargo handling service	7	8	10	10	11	13	8	10	6	13	4	8	9	9	7	5	6	8	14	7	5	7	16	4	205	cargo handling service
12	education/research service	2	1	1	2	2	4	5	1	3	2	3	1		2	5	2	4	2		3	1		3	3	52	education/research service
13	health and hygiene service		2	5	2		1	2	11	2				8	2	3	3		2	1	4	3	2	1	1	55	health and hygiene service
16	public office	1	2				4	1					1						1	1		1	1		1	14	public office
09	financial business/advertisement		1			1			1			1	1		1	1	1					1	2		1	12	financial business/advertisement
11	telecommunication service	1	1	2	1	2	2	1	1		3			3	1	1	2			1			1	1		24	telecommunication service
10	movie/play service				1			1		1									1							4	movie/play service
	total	2,829	2,569	2,479	2,311	2,120	2,126	2,120	1,971	1,788	1,785	1,595	1,572	1,590	1,649	1,660	1,642	1,505	1,483	1,426	1,426	1,462	1,457	1,513	1,501	43,579	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 14 construction machine in Middle industry (1999-2022)

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	2022	total	Middle industry
0301	civil engineering work	1,595	1,363	1,224	1,155	1,024	962	930	812	749	786	622	660	590	646	644	643	554	530	532	464	501	515	522	520	18,543	civil engineering work
0302	construction work	416	492	429	452	379	426	438	441	400	342	329	321	384	372	370	404	360	354	320	394	349	323	345	327	9,167	construction work
0303	other construction works	128	129	151	127	137	111	135	147	108	117	138	111	124	130	119	129	126	119	121	123	160	146	168	157	3,161	other construction works
1501	commercial cleaning and livestock process	70	50	72	59	76	100	81	79	73	85	66	61	63	82	89	71	71	83	93	79	86	83	79	84	1,835	commercial cleaning and livestock process
1702	others	115	113	120	115	115	117	114	105	86	102	102	94	99	71	87	77	89	78	69	74	63	81	55	83	2,224	others
0403	road cargo transportation service	73	53	68	66	72	50	36	54	59	45	49	43	46	45	39	45	36	49	42	44	29	39	34	43	1,159	road cargo transportation service
0804	other commerce	37	42	28	34	32	32	31	29	31	38	24	23	27	25	32	22	37	37	27	33	38	38	38	38	773	other commerce
0802	retail	36	24	39	33	30	23	28	25	27	24	30	22	26	23	24	35	31	27	22	17	19	22	34	31	652	retail
0109	sand and stone products	52	54	43	25	32	26	42	39	33	25	23	31	25	36	29	20	15	20	20	16	19	16	28	26	695	sand and stone products
0202	quarrying	62	46	77	34	39	33	50	35	31	24	29	31	22	24	29	27	23	16	23	28	21	28	28	24	784	quarrying
0117	other manufacturing	58	61	40	46	32	46	51	42	29	36	29	23	24	25	29	30	33	33	32	24	23	30	29	22	827	other manufacturing
0801	wholesale	19	9	16	12	17	19	15	11	12	19	15	15	20	10	18	13	17	12	8	12	15	13	11	19	347	wholesale
0701	livestock	17	6	10	8	8	17	10	13	6	7	8	12	15	17	10	13	13	7	13	16	16	13	14	18	287	livestock
0601	agriculture	6	6	11	16	3	14	13	8	16	10	13	14	10	26	16	14	23	18	19	18	20	19	27	17	357	agriculture
1403	other amusement service	12	21	25	19	9	20	22	13	21	16	19	11	16	13	19	13	11	18	5	10	11	10	11	15	360	other amusement service
0602	forestry	44	21	28	31	36	33	32	34	25	31	31	25	39	32	35	26	18	24	11	17	22	11	20	12	638	forestry

0112	metal products	11	13	14	17	11	10	17	9	12	11	6	10	4	8	9	10	5	5	16	6	8	11	9	12	244	metal products
0113	machine products	12	9	12	6	13	11	10	12	9	9	3	10	6	11	12	8	7	10	6	8	7	4	5	7	207	machine products
0110	steel making	2	3	3	10	7	8	9	6	4	8	9	8	3	6	2	6	5	6	4	5	6	8	3	6	137	steel making
0104	wood products	9	8	6	10	5	6	2	3	13	3	3	5	4	5	5	3	3	3	2	4	7	5	7	5	126	wood products
0115	transport equipment products	12	10	13	6	7	14	6	13	9	10	9	10	4	5	5	2	4	5	4	7	10	9	5	4	183	transport equipment products
0502	harbor transportation service	2	2	6	7	6	10	4	6	3	9	3	6	5	5	5	5	3	6	9	5	4	6	13	4	134	harbor transportation service
0116	electric/gas/water service	2		3		1	2	3	2	2	3	2	1	1	4			3		2		1	1	4	4	41	electric/gas/water service
0108	chemical products	9	5	12	4	8	5	3	3	3	5	7	5	4	4	3	9	3	1	3		6	3	6	3	114	chemical products
1201	education/research service	2	1	1	2	2	4	5	1	3	2	3	1		2	5	2	4	2		3	1		3	3	52	education/research service
0401	railroad/water transportation/airline service	1	4			1	2	2	3	2		2		3		2	1	1	1	2	2	1	2	4	3	39	railroad/water transportation/airline service
1401	hotel	3	1		2	4	3	2	2	2	3	2	2	3	2	4	2	2	2	1	2	1	5	1	2	53	hotel
0101	food products	1	2	2	4		2	4	2	3	3	4	2	3		2			1	3	1	4	1	1	2	47	food products
0111	nonferrous metal making	2	2	3		2	2	1		2		2	2	2	2	1	2	2	1	1	3	2	2	1	39	nonferrous metal making	
0203	other mining	4	2	3	1	2	3	6	1	3		1	2			3			2	2	1	1		1	1	39	other mining
1302	social welfare facility		1	1	1			1		1				4	1	2	3		2		3	1	2	1	1	25	social welfare facility
0402	road passenger transport service	2	1	1	1	1	1	3		1	1	1			2	1	1	1	3	1		1			1	24	road passenger transport service
0114	electrical equipment products		1	1				1	1		2	4	1		1	1	1			2	3		1		1	21	electrical equipment products
0106	pulp/paper processing products	2	1	2			1	1	1	1		1	3		2		1						2		1	19	pulp/paper processing products
1701	dispatch service	1		3	1		1				1		1	1	3		1		1	1		1			1	17	dispatch service
1601	public office	1	2				4	1			1								1	1		1	1		1	14	public office
0902	advertisement and mediator		1			1			1			1	1		1	1	1						2		1	11	advertisement and mediator
1402	restaurant	1		2								2	1			1		1				1			1	10	restaurant
0501	land cargo handling service	5	6	4	3	5	3	4	4	3	4	1	2	4	4	2		3	2	5	2	1	1	3		71	land cargo handling service
1101	telecommunication service	1	1	2	1	2	2	1	1		3			3	1	1	2			1			1	1		24	telecommunication service
1301	medical treatment service			3					11					2	1					1	1					19	medical treatment service
0404	other transportation service							1	2	3		1			1	2	1	1			1	1				14	other transportation service
0702	fishery		1		1		1	1				1	1	1					2	1			2	1		13	fishery
1303	other health and hygiene service		1	1	1		1	1		1				2		1						2				11	other health and hygiene service
0102	textile products	1						1							1					1	1					5	textile products
0201	coal mining	3				1				1																5	coal mining
0105	furniture						1	1					1										1			4	furniture
1001	movie/play service				1			1		1									1							4	movie/play service
0107	printing/bookbinding													1							1					2	printing/bookbinding

011701	auto mobile servicing	20	15	11	17	9	14	20	21	14	9	9	10	9	7	9	6	8	8	13	9	8	13	8	8	275	auto mobile servicing
060201	lumbering	37	14	22	19	25	26	23	23	14	20	22	16	26	22	26	16	7	12	8	12	10	9	13	7	429	lumbering
150103	other waste disposal service	6	6	8	6	16	16	11	10	11	12	13	15	9	13	17	9	6	9	7	13	9	8	13	7	250	other waste disposal service
011301	machine products	12	9	12	5	13	9	10	12	8	9	3	9	6	10	11	8	7	10	6	8	6	4	5	7	199	machine products
010909	other sand and stone products	24	13	14	10	17	5	13	13	14	8	10	7	10	15	8	7	3	7	5	6	3	5	9	6	232	other sand and stone products
030302	machinery/apparatus setting work	4	10	12	8	6	9	9	10	12	8	9	3	6	9	8	6	7	5	8	2	14	11	6	6	188	machinery/apparatus setting work
011709	other manufacturing	9	10	6	9	6	12	9	7	4	13	2	4	4	6	10	8	10	7	5	4	2	4	7	6	164	other manufacturing
030101	hydroelectric plant construction work	8	5	6	3	6	3	4	2		3	4	4	2	2	1	5	1	4	2	1	2	1		6	75	hydroelectric plant construction work
060209	other forestry	7	7	6	12	11	7	9	11	11	11	9	9	13	10	9	10	11	12	3	5	12	2	7	5	209	other forestry
150109	other cleaning and livestock process service	5	5	6	7	8	11	7	9	6	13	10		5	9	8	7	6	7	7	4	5	7	5	5	162	other cleaning and livestock process service
040302	specific truck transportation service	5	3	7	7	4	5	4	6	3	8	2	2	3	4	4	2	2	6	3		2	5	3	5	95	specific truck transportation service
030111	port/seaside construction work	15	15	8	11	6	5	12	2	13	9	8	5	5	5	9	9	3	10	12	3	2	3	7	4	181	port/seaside construction work
030104	railway construction work	11	6	13	7	3	5	6	8	4	5		6	3	6	4	4	6	3	10	3	5	7	8	4	137	railway construction work
011009	other steel products	1	2	1	6	4	5	5	2	3	4	4	5	2	2	1	5	3	5	2	5	5	6	2	4	84	other steel products
050202	port cargo handling service	1	1	6	5	3	8	2	5	3	5	2	5	1	2	4	4	3	5	3	4	2	5	8	3	90	port cargo handling service
150101	building maintenance service	6	3	3	1	1	8	7	4	5	2	4	1	3	2	3	1	4	2	4	3	2	4	4	3	80	building maintenance service
020209	other quarrying	7	6	7	2	3	2	3	3	3	3	2	3	2	1	2	2	2	3		2	1	2	3	3	67	other quarrying
010409	other lumber and wood products	6	2	5	5	2	1	1	1	8	1	3	2	1	1	1	2	2	2	2	3	5	2	3	3	64	other lumber and wood products
140309	other amusement service	3	8	4	3	3	3	1	1	3	2	1	1	3	1	4		2	1		3	1	4	2	3	57	other amusement service
011601	electric utility service	2		1			1	3	1	1	1	1		1	3			3		2		1	1	1	3	26	electric utility service
011501	ship building	6	5	8	3	3	7	1	7	6	6	1	7	2	5	2	1	3	3	4	2	8	6	4	2	102	ship building
040309	other land cargo transportation service	5	5	4	7	10	2	3	2	5	6	6	2	2	3	1	1		1	3	9	3	1	2	2	85	other land cargo transportation service
010401	lumbering	2	6	1	5	3	4	1	2	5	2		3	2	4	4	1	1	1		1	2	3	3	2	58	lumbering
140101	hotel	3	1		2	4	3	2	2	2	3	2	2	3	2	4	2	2	2	1	2	1	5	1	2	53	hotel
011001	steel/iron/rolling products	1	1		3	3	3	4	1	1	4	5	3	1	4	1	1	2	1	2		1	2	1	2	47	steel/iron/rolling products
120109	other education/research service	2		1	1	1	2	3	1	2	1	2	1		1	5	2	2	2		1	1		1	2	34	other education/research service
040101	railroad service	1	4				1	1	2	1		2		3		1		1	1	2	2	1	1	4	2	30	railroad service
010109	other foods		1	1	1			2	1	2	1	1	1	2					1	3	1	1		1	2	22	other foods
011509	other transport equipment products	5	5	4	3	1	4	3	4	3	2	5	1	1		2			1		1	1	3	1	1	51	other transport equipment products
050201	general harbor transportation service	1	1		2	3	2	1	1		4	1	1	3	2	1			1	5	1	1	1	4	1	37	general harbor transportation service
020309	other mining	3	2	3		2	2	5	1	3		1	2			2			2	2	1	1		1	1	34	other mining
011502	auto mobile products	1		1		3	3	2	2		2	3	2	1		1	1	1	1		4	1			1	30	auto mobile products
010899	other chemical products	2	1	1	1	1	1	3	2	1	2	2		2	2		1	1		2		1			1	27	other chemical products
130201	social welfare facility		1	1	1			1		1				4	1	2	3		2		3	1	2	1	1	25	social welfare facility
080202	auto mobile retail		1	1				2	1	1	1	2		1			5	2	2	2	1				1	23	auto mobile retail
140302	park and amusement park		2	3	1						3	2		1		2	1		3	3					1	22	park and amusement park
030103	subway construction work	1	2	2		2	1	2		1		1	2				1		1	1			2		1	20	subway construction work

010809	chemical fertilizer products	2		2	2	2					2	1	1			2					1		1	1	17	chemical fertilizer products	
120101	auto mobile practical training		1		1	1	2	2			1	1			1			2			2		2	1	17	auto mobile practical training	
170101	dispatch service	1		3	1		1				1		1	1	3		1		1	1		1			1	17	dispatch service
080101	all kinds of wholesale	3		3	1	1	2	1		1			1	1		1									1	16	all kinds of wholesale
011109	other nonferrous metal products	2		1		1				1					1		2	1		1		2	1	1	14	other nonferrous metal products	
040202	bus service	1	1	1	1			1					2	1	1	1	2							1	14	bus service	
160101	public office	1	2				4	1			1						1	1		1	1		1	1	14	public office	
010601	pulp/paper	1					1			1		1	3		1		1					2		1	12	pulp/paper	
090209	other advertisement and mediator		1			1			1			1	1		1	1	1					2		1	11	other advertisement and mediator	
140201	general restaurant	1		2							2	1			1		1				1			1	10	general restaurant	
010805	plastics products			1		1	1				1						1			1		1		1	8	plastics products	
011603	city water service			1						1	1												1	1	6	city water service	
040103	airline service					1	1	1	1	1														1	6	airline service	
011403	electronics equipment and telecommunications apparatus							1												1	2			1	5	electronics equipment and telecommunications apparatus	
080205	newspaper retail					1		2					1											1	5	newspaper retail	
150105	livestock process service											1	1											1	3	livestock process service	
050101	land cargo handling service	5	6	4	3	5	3	4	4	3	4	1	2	4	4	2		3	2	5	2	1	1	3	71	land cargo handling service	
010804	petroleum/coal products	4	2	6		3	2		1	2		1	2	1	1	1	5	2				1	3	5	42	petroleum/coal products	
080201	all kinds of retail	1	4	3	3	1	3	1	2	1	1	2	1	1	1	1		1						2	29	all kinds of retail	
110101	telecommunication service	1	1	2	1	2	2	1	1		3			3	1	1	2			1			1	1	24	telecommunication service	
011101	nonferrous metals/rolling products		1	2		1	2	1		1		2	2	2	1	2	1		1	1		2			22	nonferrous metals/rolling products	
010905	other ceramic products	4		2		1	1	1	1	2	1	1	1	1		1				1				3	21	other ceramic products	
130101	hospital			3					11				1	1					1						17	hospital	
010101	meat/dairy products	1	1		2		1		1		1	3	1								2	1			14	meat/dairy products	
040409	other transportation service							1	2	3		1			1	2	1	1			1	1			14	other transportation service	
010801	non organic or organic chemical products	1	2	1		1	1				1	1	1			1					2				12	non organic or organic chemical products	
011409	other electrical equipment			1					1		1	3			1	1	1				1				10	other electrical equipment	
070201	fishery		1					1				1	1	1					2				2	1	10	fishery	
011602	city gas service			1		1	1		1		1	1	1											2	9	city gas service	
040303	cargo/ light automobile transportation service	1		1		1	1		1	2							1						1		9	cargo/ light automobile transportation service	
130309	other health and hygiene service			1	1			1		1			1		1						2				8	other health and hygiene service	
040201	taxi service	1				1	1	1			1							1	1						7	taxi service	
050209	other harbor transportation service							1					1	1		1			1		1		1		7	other harbor transportation service	
080401	warehousing						2								1		1				1		2		7	warehousing	
011002	casting products			2	1				3																6	casting products	
011305	other precision machine products						1			1			1		1	1					1				6	other precision machine products	
080203	furniture/fittings retail			1	1			1			1	1									1				6	furniture/fittings retail	
010103	agricultural food products				1			2			1										1				5	agricultural food products	

010903	pottery products	1			1		1									1				1			5	pottery products
011203	metal press products					1							1		1			1		1			5	metal press products
010105	alcoholic drinks			1			1					1											4	alcoholic drinks
010209	other textile products	1						1												1			4	other textile products
010402	plywood	1					1						1										4	plywood
010609	other pulp/paper processing products		1	1				1	1														4	other pulp/paper processing products
010806	rubber products			1												2							4	rubber products
010902	glass products	1		1									1										4	glass products
020301	metal mining	1			1		1	1															4	metal mining
100109	other movie/play service				1			1		1											1		4	other movie/play service
170202	information processing service	1				1							1									1	4	information processing service
010602	paper processing products	1		1											1								3	paper processing products
011102	nonferrous metals casting products		1																		1		3	nonferrous metals casting products
011401	heavy electrical equipment		1									1		1									3	heavy electrical equipment
011402	electrical appliance												1								1		3	electrical appliance
020101	general coal mining	2				1																	3	general coal mining
040102	water transportation service														1	1						1	3	water transportation service
040209	other passenger transport service							1		1												1	3	other passenger transport service
070209	other fishery				1			1													1		3	other fishery
080102	furniture/fittings wholesale			1						1													3	furniture/fittings wholesale
130301	bathhouse		1											1									3	bathhouse
010104	bread/cake products														2								2	bread/cake products
010501	wood furniture							1														1	2	wood furniture
010802	chemical fiber												1									1	2	chemical fiber
010808	painting products				1									1									2	painting products
010904	fire resisting products		1																				2	fire resisting products
011302	measuring instruments				1			1															2	measuring instruments
020109	other coal mining	1																					2	other coal mining
130109	other medical treatment service													1							1		2	other medical treatment service
010203	weaving																				1		1	weaving
010301	over/under wear		1																				1	over/under wear
010503	fittings							1															1	fittings
010509	other furniture													1									1	other furniture
010702	bookbinding													1									1	bookbinding
010709	other printing and bookbinding																					1	1	other printing and bookbinding
011201	western tableware/cutting tool products																					1	1	western tableware/cutting tool products
011204	metal plating products																						1	metal plating products
011703	cleaning													1									1	cleaning
020302	petroleum mining														1								1	petroleum mining
090103	insurance business																					1	1	insurance business

