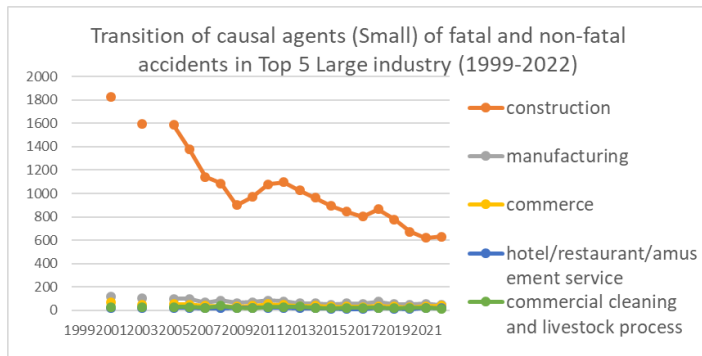
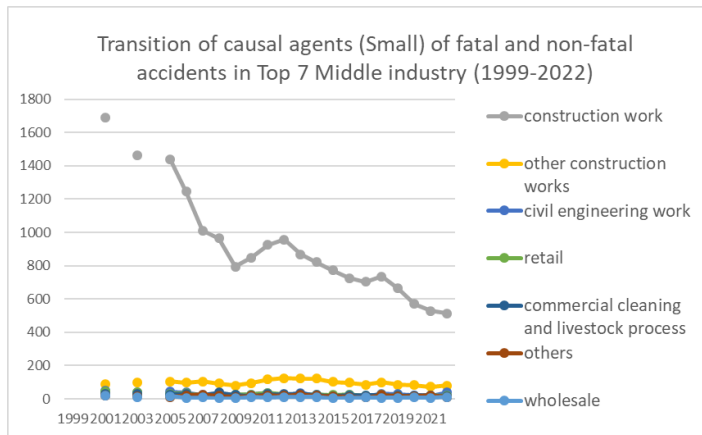


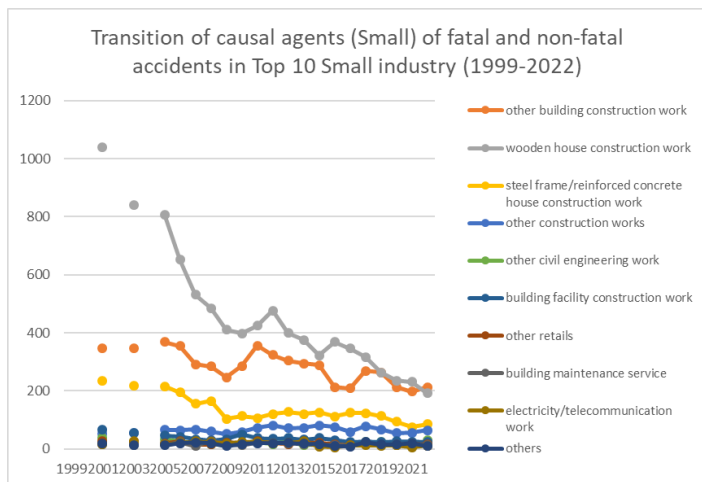
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter in Large industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter in Middle Industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter in Small Industry (1999-2022)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter 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			1,827		1,594		1,586	1,381	1,141	1,086	899	969	1,079	1,098	1,025	963	895	846	801	864	778	672	621	631	20,756	construction
01	manufacturing			117		102		98	97	66	83	65	72	83	77	59	61	50	61	55	73	52	48	57	45	1,421	manufacturing
08	commerce			67		51		53	48	38	36	32	40	53	45	36	38	31	32	30	35	33	25	34	38	795	commerce
14	hotel/restaurant/amusement service			22		20		22	22	19	17	22	22	20	23	19	18	14	12	10	22	15	10	23	17	369	hotel/restaurant/amusement service
15	commercial cleaning and livestock process			30		30		27	29	20	38	23	18	28	29	31	23	17	22	21	21	19	20	22	14	482	commercial cleaning and livestock process
17	others			22		14		12	21	26	19	10	18	20	22	25	19	17	11	9	24	16	16	20	11	352	others
13	health and hygiene service			3		10		9	6	7	4	8	10	8	12	8	11	9	9	11	13	5	8	6	11	168	health and hygiene service
07	livestock/fishery			4		8		13	8	10	5	12	6	5	7	8	9	9	7	7	11	6	9	8	11	163	livestock/fishery
06	agriculture			6		8		8	10	7	5	5	7	7	13	8	8	12	10	4	2	3	9	9	8	149	agriculture
04	transportation service			18		12		11	21	17	11	16	12	23	21	11	10	7	11	12	10	16	13	6	6	264	transportation service
09	financial business/advertisement			4		1		1	2	2	1		1	4	1	3			4						3	27	financial business/advertisement
12	education/research service			7		3		5	5	4	3	6	4	2	4	10	2	5	2	1	3	3	3	4	2	78	education/research service
11	telecommunication service			2		1		2	2		3	1	1	2	2		1	1	2		1		2	1	2	26	telecommunication service
02	mining			4		1		3	1	1	1	2	2	2	1		1				1		1	1	2	24	mining
10	movie/play service							1			2	1	1		1	1	2								1	10	movie/play service
05	cargo handling service			2		3		3	2	3	1	3		3	1	4	2							2		29	cargo handling service
16	public office					1		1					1	1	1	1			1	1						8	public office
	total			2,135		1,859		1,851	1,657	1,360	1,317	1,103	1,187	1,337	1,360	1,246	1,170	1,069	1,030	962	1,080	946	836	814	802	25,121	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 415 roof, beam, haze, crossbeam, principal rafter 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
0302	construction work			1,690		1,461		1,438	1,244	1,012	964	795	848	926	956	869	822	773	725	703	734	664	569	529	514	18,236	construction work
0303	other construction works			87		96		105	98	105	93	81	95	117	124	121	122	103	98	84	99	86	83	73	80	1,950	other construction works
0301	civil engineering work			50		37		43	39	24	29	23	26	36	18	35	19	19	23	14	31	28	20	19	37	570	civil engineering work
0802	retail			43		38		30	32	20	23	26	25	36	27	21	26	23	25	18	23	18	13	22	18	507	retail
1501	commercial cleaning and livestock process			30		30		27	29	20	38	23	18	28	29	31	23	17	22	21	21	19	20	22	14	482	commercial cleaning and livestock process
1702	others			21		14		12	21	26	19	10	18	20	19	25	19	17	10	9	24	15	16	20	11	346	others
0801	wholesale			19		9		15	7	9	4	4	11	8	10	10	10	3	5	8	7	6	8	7	10	170	wholesale
0804	other commerce			5		4		8	9	9	9	2	4	8	8	5	2	4	2	4	5	9	3	5	10	115	other commerce
0701	livestock			4		6		11	6	8	5	10	5	4	7	8	9	8	6	6	11	5	9	7	9	144	livestock
0101	food products			12		15		25	19	12	16	9	14	12	20	10	10	10	5	3	10	4	7	9	8	230	food products
1403	other amusement service			2		9		6	9	7	8	14	9	6	8	6	4	8	3	3	4	8	3	8	8	133	other amusement service
1401	hotel			16		7		12	10	4	6	7	6	11	12	10	9	5	5	7	14	5	3	13	7	169	hotel
0601	agriculture			3		6		7	7	7	4	4	6	6	11	7	6	10	8	3	2	2	9	8	7	123	agriculture
1302	social welfare facility			1		6		5	5	5	2	3	6	6	8	8	8	6	3	9	9	3	5	5	7	110	social welfare facility
0108	chemical products			3		9		10	7	6	9	5	3	5	3	4	4	6	4	2	4	5	5	3	6	103	chemical products

0117	other manufacturing			12		8		8	9	8	9	9	8	14	8	8	4	5	7	12	9	8	4	10	5	165	other manufacturing
0403	road cargo transportation service			16		10		7	16	16	11	14	11	17	19	9	7	5	8	9	8	12	9	5	4	213	road cargo transportation service
0104	wood products			16		11		8	11	8	7	7	7	8	11	7	12	3	2	7	1	11	3	4	4	148	wood products
0109	sand and stone products			15		7		8	6	4	6	12	6	9	9	6	5	3	6	6	8	3	4	10	3	136	sand and stone products
0113	machine products			9		3		5	4	5	6	1	3	5	5	2	5	2	5	1	7	4	2	4	3	81	machine products
0115	transport equipment products			6		5		4	8	1	2	2	9	3	3	2	3	1	4	3	3	2	2	2	3	68	transport equipment products
0106	pulp/paper processing products			3		1		2	1	2	1	3	1			1	1		2	2	2	1	2	3	3	31	pulp/paper processing products
0116	electric/gas/water service					5			1				1	2					1		1	1	1	2	3	19	electric/gas/water service
0902	advertisement and mediator			3				1	1	1			1	2	1	1			2						3	16	advertisement and mediator
0112	metal products			24		20		15	15	10	20	8	14	14	9	9	10	10	15	11	16	8	10	4	2	244	metal products
1201	education/research service			7		3		5	5	4	3	6	4	2	4	10	2	5	2	1	3	3	3	4	2	78	education/research service
1402	restaurant			4		4		4	3	8	3	1	7	3	3	3	5	1	4		4	2	4	2	2	67	restaurant
1301	medical treatment service			1		4		3	1	2		4	2				2	3	6	1	3	1	2		2	37	medical treatment service
1101	telecommunication service			2		1		2	2		3	1	1	2	2		1	1	2		1		2	1	2	26	telecommunication service
1303	other health and hygiene service			1				1			2	1	2	2	4		1			1	1	1	1	1	2	21	other health and hygiene service
0702	fishery					2		2	2	2		2	1	1				1	1	1		1		1	2	19	fishery
0114	electrical equipment products			4		2			9	1	2	2	4	4	2	2	2		3	1	2	1		2	1	44	electrical equipment products
0105	furniture			7		3		4	3	2				2	2	2	1	3	3		2	1	2		1	38	furniture
0110	steel making					4		4	2	3		3		3		1	1	2	1	3	4		1	1	1	34	steel making
0602	forestry			3		2		1	3		1	1	1	1	2	1	2	2	2	1		1		1	1	26	forestry
0402	road passenger transport service			1				1	1	1				5	1		1		3	2	1	3	4		1	25	road passenger transport service
0401	railroad/water transportation/airline service					2		3	4			1	1	1	1	2	1	2		1	1	1		1	1	23	railroad/water transportation/airline service
0202	quarrying			4		1		3	1	1	1	2	1	2	1		1			1			1	1	1	21	quarrying
0107	printing/bookbinding			2						2					2		1	2	1	2			2	1	1	16	printing/bookbinding
0111	nonferrous metal making			1		1			1	1	2			2			1	1		1			1	1	1	14	nonferrous metal making
1001	movie/play service							1		2	1	1		1	1	2									1	10	movie/play service
0203	other mining																						1		1	2	other mining
0102	textile products			1		7		4	1	1	2	2	2	1	1	4	1	2	2	1	2		1			35	textile products
0501	land cargo handling service			1		2			3	2	3	1	1		2		3	1						2		21	land cargo handling service
0103	fiber products			2		1		1			1	1	1			1					2	3	1	1		15	fiber products
0901	financial business			1		1			1	1	1			2		2			2							11	financial business
0502	harbor transportation service			1		1							2		1	1	1	1								8	harbor transportation



120109	other education/research service			7		3		3	5	4	3	6	4	2	4	8	2	4	1	1	1	2	3	3	2	68	other education/research service
011301	machine products			5		3		5	4	3	5	1	2	5	5	1	3	1	5	1	7	4	2	2	2	66	machine products
010901	cement products			6		4		2	2	2	4	4	3	4	3	2	3	1	3	3	3	2	2	2	2	57	cement products
080204	fuel retail			2		4		3	2	2	3		3	5	3	3	3		4	3	4	3	1	1	2	51	fuel retail
030106	road construction work			3		5		2	2		1	3	3	6	1	2	2	1	5	1	3	3		5	2	50	road construction work
010409	other lumber and wood products			6		2		1	5	3	3	1	6	2	2	3	5	2		1		2		2	2	48	other lumber and wood products
011701	auto mobile servicing			4		1		1	3	4	2	3	2	5	2	2	1	1	1	3	2	4		4	2	47	auto mobile servicing
140301	golf course					1		2	4	4	4	6	2	2	3	1	2	4		1	1	1	2		2	42	golf course
130101	hospital			1		4		3	1	2		4	2			2	3	5	1	3		1		2	34	hospital	
010805	plastics products					2		3	2	2	2	2	1	1	1	1	2	3	1	1	3	1		1	2	31	plastics products
110101	telecommunication service			2		1		2	2		3	1	1	2	2		1	1	2		1		2	1	2	26	telecommunication service
010103	agricultural food products							2	3	2		1	2	2	1			3	1		3	1	1	1	2	25	agricultural food products
010601	pulp/paper			2							1	1							1	1	1	2	2	2	13	pulp/paper	
070209	other fishery					2			2	2		1	1	1								1			2	12	other fishery
011601	electric utility service					3									1				1		1	1			2	9	electric utility service
011709	other manufacturing			4		3		4	3	3	5	5	5	7	6	4	2	4	4	6	3	4	2	2	1	77	other manufacturing
150109	other cleaning and livestock process service			7		8		7	1	4	3	3	1	2	3	6	3		2	5	4	5	1	1	1	67	other cleaning and livestock process service
150102	industrial waste management service			6		7		5	3	2	5	3	1	2	6	3	4	2	5	2	1	2	1	1	1	62	industrial waste management service
140201	general restaurant			4		3		4	3	6	3	1	6	3	3	3	5	1	4		4	1	4	2	1	61	general restaurant
010909	other sand and stone products			7		1		4	3	2	2	5	2	4	4	3	1		1	1	2	1	1	4	1	49	other sand and stone products
011502	auto mobile products			3		2		4	3			1	5	1	2	2	2		3	2	2	2		1	1	36	auto mobile products
030109	land consolidation civil engineering work			2		3		3	3	1	4	3	2	3		2	1		2	1	2		1	2	1	36	land consolidation civil engineering work
010102	fishery products			3		1		4		2	5		2	2	2	1	1	1	1	1	1		1	2	1	31	fishery products
010104	bread/cake products			2		3		3	1	2	1	1	2	1	4	1	1	1		1	1	2		2	1	30	bread/cake products
011702	machine repair			3		2		2	3			1				2	1		1	1	3		1	2	1	23	machine repair
040101	railroad service					2		3	4			1	1	1	1	2	1	2		1	1	1		1	1	23	railroad service
010899	other chemical products			1		4		2	1		3	1	1	1	1			1		1	1		3		1	22	other chemical products
011002	casting products					2		3	1	3		2		1		1	1	1	1	3	1			1	1	22	casting products
170201	security service			2		2			1	4		1	2			3	1	1	1	1			1	1	1	22	security service
011501	ship building					3			5	1	1		2	2	1		1	1	1		1		1		1	21	ship building
011703	cleaning			1		2		1		1	2		1	2					1	2	1		1	2	1	18	cleaning
010501	wood furniture			2		3		1	1	2					2		1		1		1		1		1	16	wood furniture
030105	bridge construction work			2		1			2		2	1		1			2		2		1			1	1	16	bridge construction work
080202	auto mobile retail			1				1				1		1	1	2			1	1	1			4	1	15	auto mobile retail
010602	paper processing products			1		1		1	1	1		1				1	1		1	1	1			1	1	13	paper processing products
011305	other precision machine products			3						2		1				2	1							2	1	12	other precision machine products
011403	electronics equipment and telecommunications apparatus			3									1	1	2	1	1		1					1	1	12	electronics equipment and telecommunications apparatus

020201	quarrying			2		1		2		1	1	2	1							1	1	12	quarrying			
060209	other forestry			2		2						1	2		2				1		1	1	12	other forestry		
130301	bathhouse											1	2	2	1		1	1	1	1	1	1	12	bathhouse		
010701	printing service			2					1					1		1	1	1			1	1	1	11	printing service	
011509	other transport equipment products			3						1	1	2							1		1	1	1	11	other transport equipment products	
040309	other land cargo transportation service					2			1		1	1	2								1	1	1	10	other land cargo transportation service	
080102	furniture/fittings wholesale			1				1	1	1					1			1			1	1	1	10	furniture/fittings wholesale	
040202	bus service			1					1					3							3		1	9	bus service	
130309	other health and hygiene service			1				1			2				3							1	1	9	other health and hygiene service	
030107	river civil engineering work			2				1		1	1											1	1	1	8	river civil engineering work
011602	city gas service					1			1			1										1	1	1	6	city gas service
140209	other restaurants					1				2			1								1			1	6	other restaurants
100109	other movie/play service									1					1	1	1						1	5	other movie/play service	
011109	other nonferrous metal products												2									1	1	4	other nonferrous metal products	
020309	other mining																					1		1	2	other mining
080201	all kinds of retail			6		4		4	3	2	1	3	1	1	2			1	1	2	1	2		35	all kinds of retail	
010101	meat/dairy products			1		2		4	2	2	4	2	4	1	1	2	2	1				2		30	meat/dairy products	
150103	other waste disposal service					1			1	4	2	1	3	2		1		2	1	3	1		2	2	26	other waste disposal service
010105	alcoholic drinks			2		2		5	4		1	1		3	2	2		1				1		24	alcoholic drinks	
080203	furniture/fittings retail			3		6		2	1	1	3			2			1	1	1		1			22	furniture/fittings retail	
050101	land cargo handling service			1		2			3	2	3	1	1		2		3	1					2	21	land cargo handling service	
011409	other electrical equipment					1			6	1	2		2		1	1			1	2	1			20	other electrical equipment	
010209	other textile products					5		2	1	1	1	1		1		1	1		2		1			17	other textile products	
040201	taxi service							1	1					2	1		1		3	1	1	3	1	15	taxi service	
140302	park and amusement park					1		1		1		2		2	1	1		1	1	1	1	2		15	park and amusement park	
010903	pottery products			1		1		2				1		1			1	1	1	1	1		3	14	pottery products	
060201	lumbering			1				1	3		1	1	1			1		2	2	1				14	lumbering	
010309	other fiber products			2		1		1			1	1				1				1	3	1	1	13	other fiber products	
011204	metal plating products			1		1		2			2			1	1	1		1	1	1				13	metal plating products	
010503	fittings			2				2	1						2		1	2			1			11	fittings	
011203	metal press products			1				1		1		1			1		1	1	1	2	1			11	metal press products	
080401	warehousing							1	1	1	1	1			1		1		1	1	2	1		11	warehousing	
010402	plywood							2	1						3	1			1		2			10	plywood	
010806	rubber products			1		1			1	1	1	1			2		1				1			10	rubber products	
011402	electrical appliance					1			3		2	1	1				1					1		10	electrical appliance	
010204	dyeing			1				2			1	1			1		1		1		1			9	dyeing	
010509	other furniture			3				1						1			2			1	1			9	other furniture	
010905	other ceramic products			1				1			2	1		1	1			1		1				9	other ceramic products	
030111	port/seaside construction work							1		1	1	1			1						3			9	port/seaside construction work	
080205	newspaper retail			3					1	1				1	1			1	1					9	newspaper retail	

120101	auto mobile practical training							2							2		1	1		2			1			9	auto mobile practical training
020202	gravel digging			2				1	1					2	1					1						8	gravel digging
090103	insurance business					1			1				2		2			1								8	insurance business
160101	public office					1		1					1	1	1	1			1	1						8	public office
011001	steel/iron/rolling products					1		1	1					1									1			7	steel/iron/rolling products
011101	nonferrous metals/rolling products					1				1	2							1		1				1		7	nonferrous metals/rolling products
030108	sand collapse prevention civil engineering work								3								1	1								7	sand collapse prevention civil engineering work
070201	fishery							2									1	1	1					1		7	fishery
040302	specific truck transportation service			1		2								1	2											6	specific truck transportation service
050202	port cargo handling service												2		1	1	1	1								6	port cargo handling service
080101	all kinds of wholesale					1		1		2				1	1											6	all kinds of wholesale
170101	dispatch service			1												3			1					1		6	dispatch service
010203	weaving														1	2			1							5	weaving
010609	other pulp/paper processing products							1		1													1			5	other pulp/paper processing products
011009	other steel products					1																			3	5	other steel products
040303	cargo/ light automobile transportation service									1					1	2								1		5	cargo/ light automobile transportation service
100101	movie production and delivery service								1		1	1	1				1									5	movie production and delivery service
010106	soft drinks			1											1				2							4	soft drinks
010804	petroleum/coal products								1		1						1									4	petroleum/coal products
010808	painting products					1		2																1		4	painting products
010809	chemical fertilizer products							1			1								1	1						4	chemical fertilizer products
010902	glass products														1				1				1	1		4	glass products
011603	city water service					1								1	1									1		4	city water service
010202	cotton-spinning					2																		1		3	cotton-spinning
010709	other printing and bookbinding									1														1		3	other printing and bookbinding
010803	pharmaceuticals								1																1	3	pharmaceuticals
010904	fire resisting products					1																		1		3	fire resisting products
011102	nonferrous metals casting products			1					1								1									3	nonferrous metals casting products
030104	railway construction work															1	1									3	railway construction work
040409	other transportation service			1																						3	other transportation service
090101	banking/trust business			1						1															1	3	banking/trust business
010301	over/under wear																								1	2	over/under wear
010502	metal furniture								1																	2	metal furniture
010702	bookbinding															1										2	bookbinding
011303	optical instruments			1												1										2	optical instruments
011401	heavy electrical equipment			1																						2	heavy electrical equipment
030102	tunnel construction work									1																2	tunnel construction work
050201	general harbor transportation			1		1																				2	general harbor transportation

