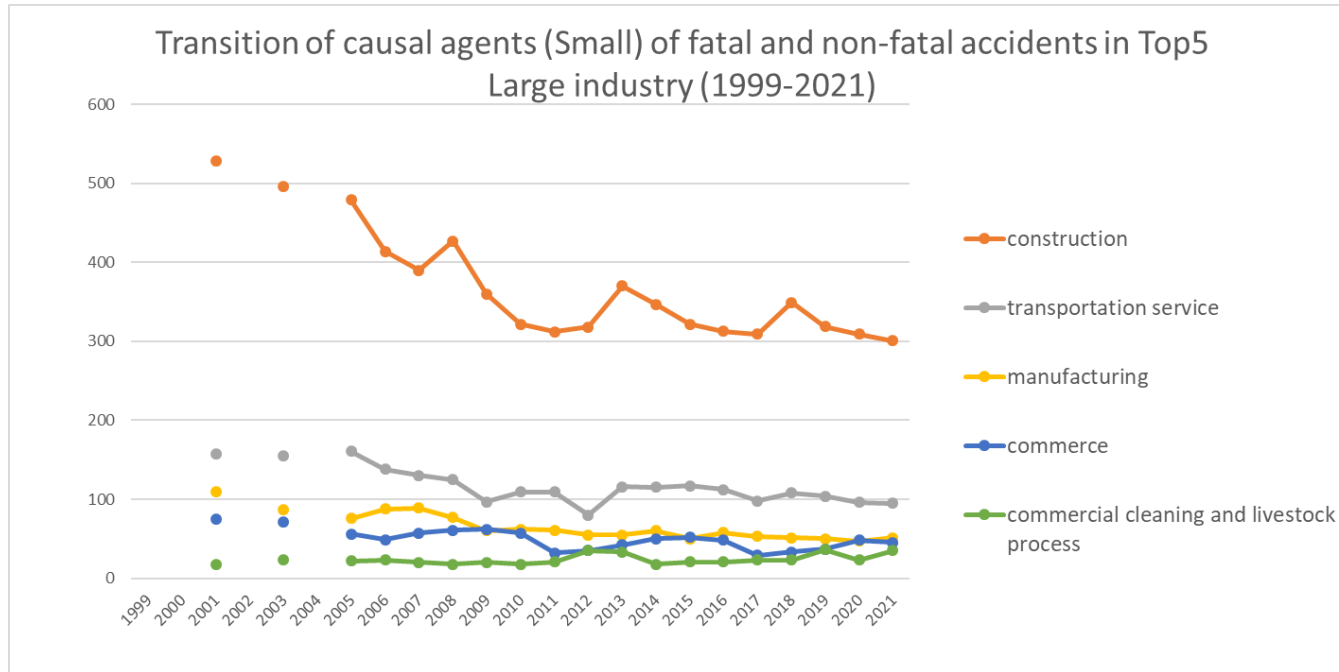
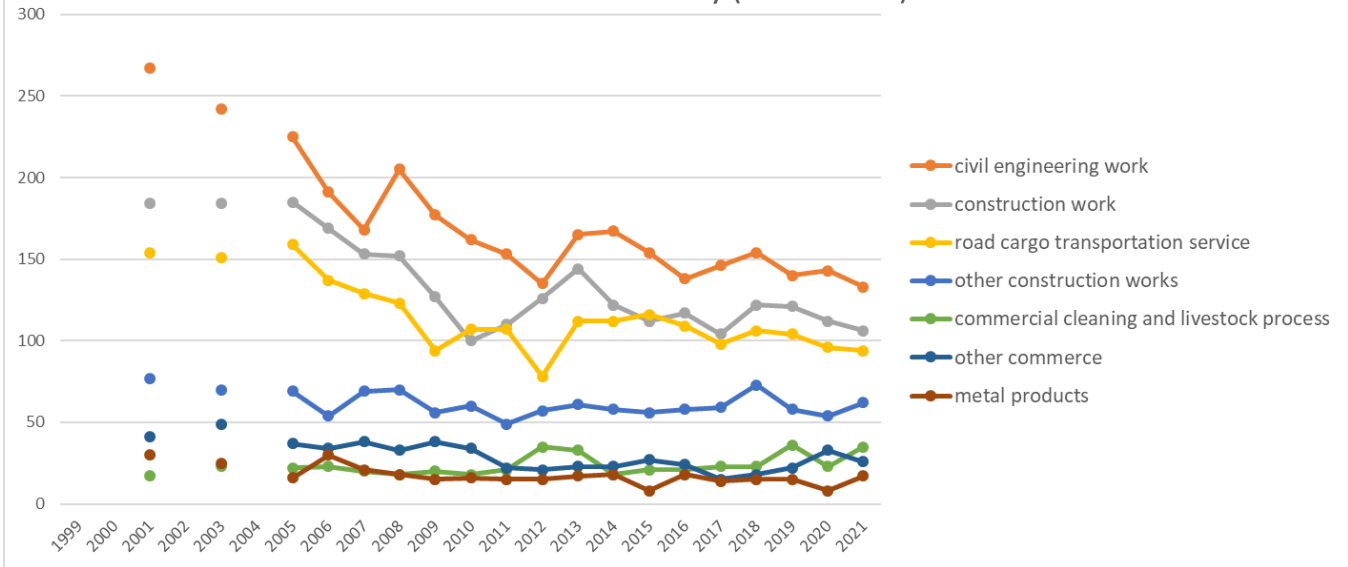


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane (1999-2021)



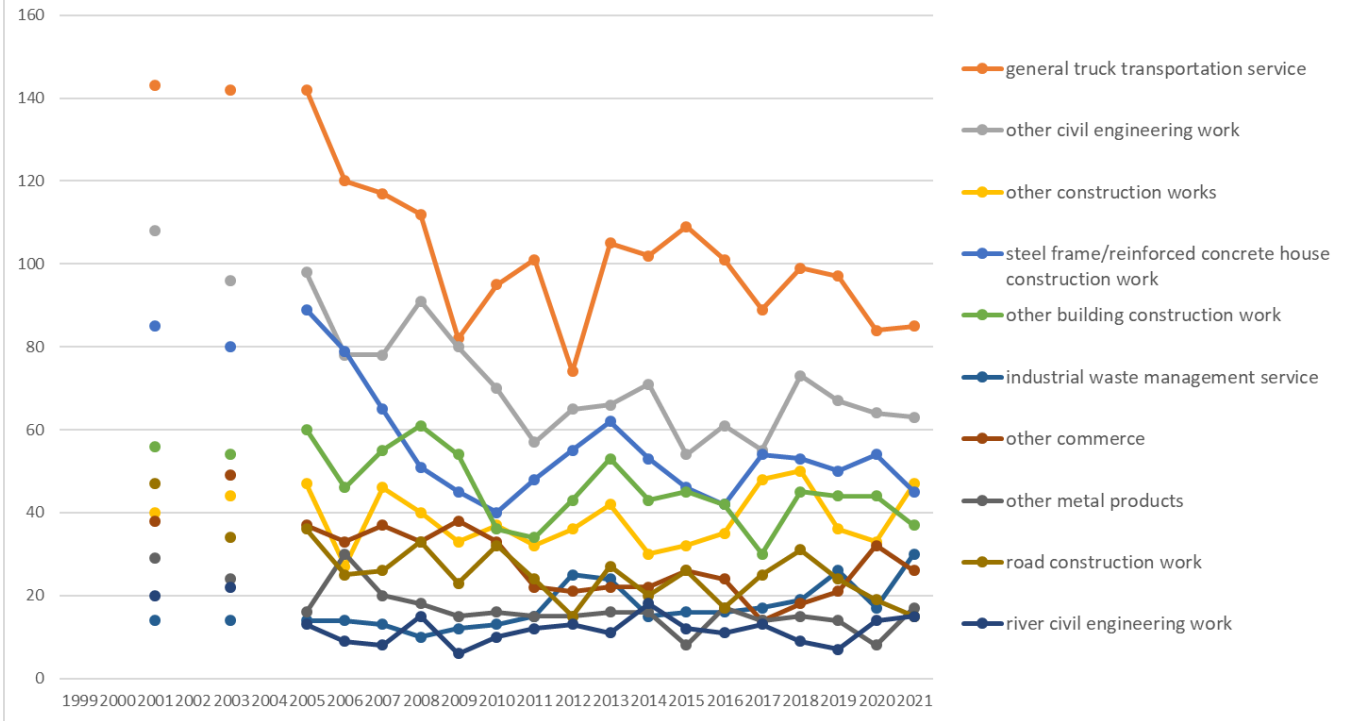
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane in Large industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents in Top7 Middle industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane in Middle Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents in Top10 Small industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane 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
03	construction			528		496		479	414	390	427	360	322	312	318	370	347	322	313	309	349	319	309	301	6,985	construction
04	transportation service			157		155		161	138	130	125	97	109	109	80	116	115	117	112	98	108	104	96	95	2,222	transportation service
01	manufacturing			110		87		76	88	89	77	60	62	61	55	55	60	50	58	53	51	50	47	51	1,240	manufacturing
08	commerce			75		71		56	49	57	61	62	57	32	35	42	50	52	48	29	33	37	48	45	939	commerce
15	commercial cleaning and livestock process			17		23		22	23	20	18	20	18	21	35	33	18	21	21	23	23	36	23	35	450	commercial cleaning and livestock process
17	others			27		30		30	13	10	18	18	19	21	12	20	11	18	16	20	19	16	21	11	350	others
06	agriculture			16		16		21	19	14	17	9	18	9	16	15	11	10	13	13	12	10	10	10	259	agriculture

05	cargo handling service			31		24		18	12	16	17	10	8	12	9	5	6	12	6	15	4	9	6	10	230	cargo handling service
07	livestock/fishery			4		5		5	5	3	4	7	4	5	4	3	3	8	7	2	2	5	6	3	85	livestock/fishery
12	education/research service											2								1				2	5	education/research service
02	mining			1				1	2	6	1	1	1	4	1		6	4	2			3	2	1	36	mining
14	hotel/restaurant/amusement service			1		2			2	1	2	2	1	1			2		1	1	1		2	1	20	hotel/restaurant/amusement service
13	health and hygiene service							1						1										1	3	health and hygiene service
09	financial business/advertisement			2		2										1		1							6	financial business/advertisement
11	telecommunication service								1		1										1				3	telecommunication service
16	public office					1											1								2	public office
10	movie/play service														1										1	movie/play service
	total			969		912		870	766	736	768	648	619	588	566	660	630	615	597	564	603	589	570	566	12,836	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane 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
0301	civil engineering work			267		242		225	191	168	205	177	162	153	135	165	167	154	138	146	154	140	143	133	3,265	civil engineering work
0302	construction work			184		184		185	169	153	152	127	100	110	126	144	122	112	117	104	122	121	112	106	2,550	construction work
0403	road cargo transportation service			154		151		159	137	129	123	94	107	107	78	112	112	116	109	98	106	104	96	94	2,186	road cargo transportation service
0303	other construction works			77		70		69	54	69	70	56	60	49	57	61	58	56	58	59	73	58	54	62	1,170	other construction works
1501	commercial cleaning and livestock process			17		23		22	23	20	18	20	18	21	35	33	18	21	21	23	23	36	23	35	450	commercial cleaning and livestock process
0804	other commerce			41		49		37	34	38	33	38	34	22	21	23	23	27	24	15	18	22	33	26	558	other commerce
0112	metal products			30		25		16	30	21	18	15	16	15	15	17	18	8	18	14	15	15	8	17	331	metal products

0801	wholesale			11		8		7	8	5	14	11	9	2	7	7	13	14	10	9	7	8	10	13	173	wholesale
0117	other manufacturing			24		24		21	21	24	22	13	14	8	15	12	14	13	13	7	8	12	10	12	287	other manufacturing
1702	others			26		30		29	13	10	18	18	19	21	12	20	11	18	16	20	19	16	21	11	348	others
0113	machine products			9		11		6	8	8	2	5	3	8	3	5	9	6	6	4	7	4	1	8	113	machine products
0501	land cargo handling service			14		7		7	6	6	8	7	4	2	6	2	3	3	2	5	1	2	1	7	93	land cargo handling service
0802	retail			23		14		12	7	14	14	13	14	8	7	12	14	11	14	5	8	7	5	6	208	retail
0109	sand and stone products			28		10		17	12	19	20	9	14	15	10	12	4	13	9	11	12	9	11	5	240	sand and stone products
0602	forestry			15		12		16	13	9	10	8	14	5	7	9	8	5	4	11	2	4	4	5	161	forestry
0601	agriculture			1		4		5	6	5	7	1	4	4	9	6	3	5	9	2	10	6	6	5	98	agriculture
0502	harbor transportation service			17		17		11	6	10	9	3	4	10	3	3	3	9	4	10	3	7	5	3	137	harbor transportation service
0702	fishery			4		5		5	5	3	4	7	3	4	4	3	3	8	6	2	2	4	6	3	81	fishery
0110	steel making			6		3		2		3	4	3	1	6	1	2	1	2	1	4	3	2	4	3	51	steel making
0115	transport equipment products			6		5		5	4	7	2	5	7	4	3	5	7	4	4	2	1	4	6	2	83	transport equipment products
0104	wood products			4		6		5	6	3	4	7	4	1	3	1	6	3	3	5	3	2	4	2	72	wood products
1201	education/research service												2							1				2	5	education/research service
0202	quarrying			1					2	5	1	1	1	4	1		6	3	2			3	2	1	33	quarrying
0108	chemical products							2	1		2	2		1			1		2					1	12	chemical products
0404	other transportation service					2		1		1		1		2	1	1					1			1	11	other transportation service
0106	pulp/paper processing products														2									1	3	pulp/paper processing products
1401	hotel									1													1	1	3	hotel

1001	movie/play service																										1												1	movie/play service	
1301	medical treatment service																																						1	medical treatment service	
1303	other health and hygiene service																																						1	other health and hygiene service	
1402	restaurant																																						1	restaurant	
0803	haircut/beauty salon																																								haircut/beauty salon
0901	financial business																																								financial business
	total					969	912	870	766	736	768	648	619	588	566	660	630	615	597	564	603	589	570	566	12,836																total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 212 mobile crane 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
040301	general truck transportation service			143		142		142	120	117	112	82	95	101	74	105	102	109	101	89	99	97	84	85	1,999	general truck transportation service
030199	other civil engineering work			108		96		98	78	78	91	80	70	57	65	66	71	54	61	55	73	67	64	63	1,395	other civil engineering work
030309	other construction works			40		44		47	27	46	40	33	37	32	36	42	30	32	35	48	50	36	33	47	735	other construction works
030201	steel frame/reinforced concrete house construction work			85		80		89	79	65	51	45	40	48	55	62	53	46	42	54	53	50	54	45	1,096	steel frame/reinforced concrete house construction work
030209	other building construction work			56		54		60	46	55	61	54	36	34	43	53	43	45	42	30	45	44	44	37	882	other building construction work
150102	industrial waste management service			14		14		14	14	13	10	12	13	15	25	24	15	16	16	17	19	26	17	30	324	industrial waste management service
080409	other commerce			38		49		37	33	37	33	38	33	22	21	22	22	26	24	14	18	21	32	26	546	other commerce
011209	other metal products			29		24		16	30	20	18	15	16	15	15	16	16	8	17	14	15	14	8	17	323	other metal products
030106	road construction work			47		34		36	25	26	33	23	32	24	15	27	20	26	17	25	31	24	19	15	499	road construction work

010909	products			16		6		11	5	7	10	6	9	11	6	9	3	7	4	6	5	4	4	3	132	products
060201	lumbering			11		7		7	10	8	7	3	9	4	5	7	3	3	2	8	2	3	2	3	104	lumbering
040302	specific truck transportation service			5		2		7	5	5	5	6	5	3	2	2	5	2	4	6	3	4	7	3	81	specific truck transportation service
030108	sand collapse prevention civil engineering work			2		10		6	6		6	10	2	4	2	3	2	2	8	2	2	4	1	3	75	sand collapse prevention civil engineering work
150103	other waste disposal service					5		4	3	2	4	5	4	3	6	8	3	2	4	3	1	2	2	3	64	other waste disposal service
010901	cement products			12		4		6	6	12	10	3	4	4	4	2	1	6	5	5	7	5	7	2	105	cement products
050202	port cargo handling service			12		12		10	4	8	8	3	3	8	2	2	2	8	4	6	2	5	4	2	105	port cargo handling service
070201	fishery			3		3		5	4	3	4	7	2	3	4	2	3	5	5	2	2	3	4	2	66	fishery
060209	other forestry			4		5		9	3	1	3	5	5	1	2	2	5	2	2	3		1	2	2	57	other forestry
150109	other cleaning and livestock process service			3		2		3	6	5	4	2	1	1	3			2	1	3	2	5	3	2	48	other cleaning and livestock process service
030102	tunnel construction work			7		2		2	6	2	4		1	2	2	3	1	5	1	1	2	2	2	2	47	tunnel construction work
010401	lumbering			2		4		4	6	2		3	4	1	1		2	1	2	4	1		2	2	41	lumbering
011001	steel/iron/rolling products			2		1		1		1	1	2	1	1		1			1	1				2	15	steel/iron/rolling products
170201	security service			3		4		6	4	3	5	3	2	2	1	7	2	5	3	3	4	2	5	1	65	security service
011009	other steel products			4		2		1		2	3	1		5	1	1	1	2	1	3	2	1	4	1	35	other steel products
050201	general harbor transportation service			5		5		1	2	2	1		1	1	1	1	1		4	1	2	1	1		31	general harbor transportation service
011509	other transport equipment products			2		1		3	2			1	2		1	2	1	2		1		1	1	1	21	other transport equipment products
040303	cargo/ light automobile transportation service					1		2	3	1	1		2	1	1	1		1	1			1	1		18	cargo/ light automobile transportation service
080202	auto mobile retail			1				1		4	1	1	1	2	1	1	1		1	1				1	17	auto mobile retail
030101	hydroelectric plant construction work			1				1	1		1	1		2			3	2			1		2	1	16	hydroelectric plant construction work

070209	other fishery			1		2			1				1	1		1			1	2	1	15	other fishery			
011502	auto mobile products							1		1	1	1			1	3	1	1			1	1	12	auto mobile products		
040409	other transportation service					2		1		1		1		2	1	1				1		1	11	other transportation service		
080204	fuel retail			1				1		1				1	2					1	2		1	10	fuel retail	
120101	auto mobile practical training											2								1			1	4	auto mobile practical training	
010805	plastics products											1		1									1	3	plastics products	
020209	other quarrying									1						1							1	3	other quarrying	
140101	hotel									1												1	1	3	hotel	
010609	other pulp/paper processing products													1									1	2	other pulp/paper processing products	
120109	other education/research service																						1	1	other education/research service	
130201	social welfare facility																						1	1	social welfare facility	
011709	other manufacturing			4		6		3	5	7	8	4	2	1	3	1	3	3	3	2	2	2	1		60	other manufacturing
011501	ship building			4		4		1	2	6	1	3	5	4	2	2	3	1	3	1	1	3	4		50	ship building
010409	other lumber and wood products			2		2		1		1	3	4			2	1	4	2	1		2	2	2		29	other lumber and wood products
020201	quarrying			1						1	1		1	1	1		4	2	2			2			16	quarrying
020202	gravel digging								2	3			1		3			1	1			1	2		14	gravel digging
150101	building maintenance service					2		1				1		2	1			1			1	3	1		13	building maintenance service
080401	warehousing			3					1	1				1			1	1	1		1		1		12	warehousing
140301	golf course					2				1	1	1	1	1			2		1						10	golf course
030103	subway construction work			2				2		1	1										1	1	1		9	subway construction work
010109	other foods			1					1						1			1	2	1					7	other foods
040102	water transportation service			2					1		2				1			1							7	water transportation service
040202	bus service			1		1		1						2			1								6	bus service
080101	all kinds of wholesale			1		1						1					2		1						6	all kinds of wholesale

090209	other advertisement and mediator			2		2									1		1						6	other advertisement and mediator	
140309	other amusement service			1				1			1						1	1		1			6	other amusement service	
011305	other precision machine products			1						1				1	1	1							5	other precision machine products	
011403	electronics equipment and telecommunications apparatus									1			2						2				5	electronics equipment and telecommunications apparatus	
011601	electric utility service									1				1	1							2	5	electric utility service	
040101	railroad service					1									1			1		1			5	railroad service	
040201	taxi service													1	1		1	1					5	taxi service	
080201	all kinds of retail					1		1		2			1										5	all kinds of retail	
010101	meat/dairy products					1		1	2														4	meat/dairy products	
010801	non organic or organic chemical products												2						2				4	non organic or organic chemical products	
011204	metal plating products					1									1	2							4	metal plating products	
011409	other electrical equipment					1				2					1								4	other electrical equipment	
070101	livestock												1	1					1			1	4	livestock	
010103	agricultural food products					1		1						1									3	agricultural food products	
010209	other textile products											1			1				1				3	other textile products	
011109	other nonferrous metal products																						3	other nonferrous metal products	
011401	heavy electrical equipment																					1	3	heavy electrical equipment	
011603	city water service																					1	1	3	city water service
080203	furniture/fittings retail																					2	3	furniture/fittings retail	
110101	telecommunication service																					1	3	telecommunication service	
010102	fishery products																					1	1	2	fishery products

010309	other fiber products					1			1													2	other fiber products	
010402	plywood									1												2	plywood	
010899	other chemical products							1														2	other chemical products	
010902	glass products								1													2	glass products	
011201	western tableware/cutting tool products					1																2	western tableware/cutting tool products	
011203	metal press products									1												2	metal press products	
011302	measuring instruments																				1	1	2	measuring instruments
011703	cleaning																					2	cleaning	
020309	other mining									1												2	other mining	
040209	other passenger transport service																					2	other passenger transport service	
080102	furniture/fittings wholesale																					2	furniture/fittings wholesale	
160101	public office					1																2	public office	
170101	dispatch service																					2	dispatch service	
010105	alcoholic drinks																					1	alcoholic drinks	
010501	wood furniture																					1	wood furniture	
010601	pulp/paper																					1	pulp/paper	
010701	printing service																					1	printing service	
010804	petroleum/coal products																					1	petroleum/coal products	
010806	rubber products																					1	rubber products	
010809	chemical fertilizer products																					1	chemical fertilizer products	
010905	other ceramic products																					1	other ceramic products	
011002	casting products																					1	casting products	
011402	electrical appliance																					1	electrical appliance	
020101	general coal mining																					1	general coal mining	
	other harbor transportation																						other harbor transportation	

