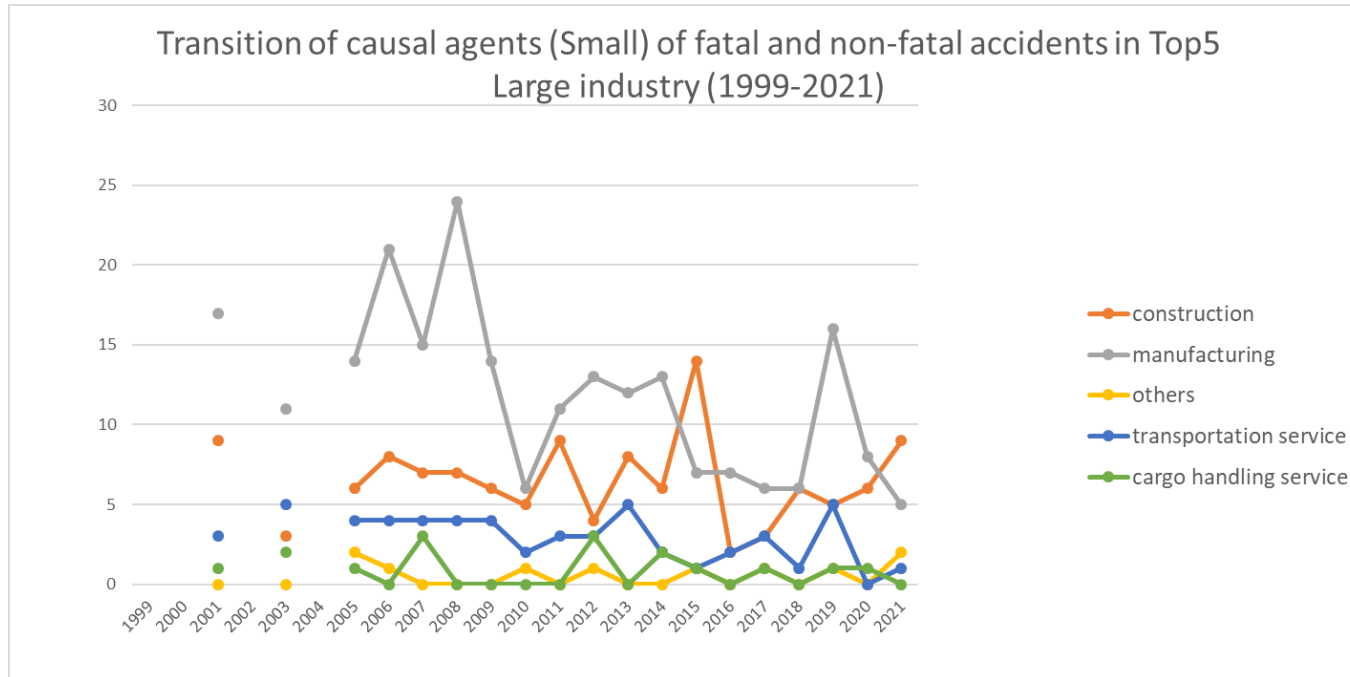
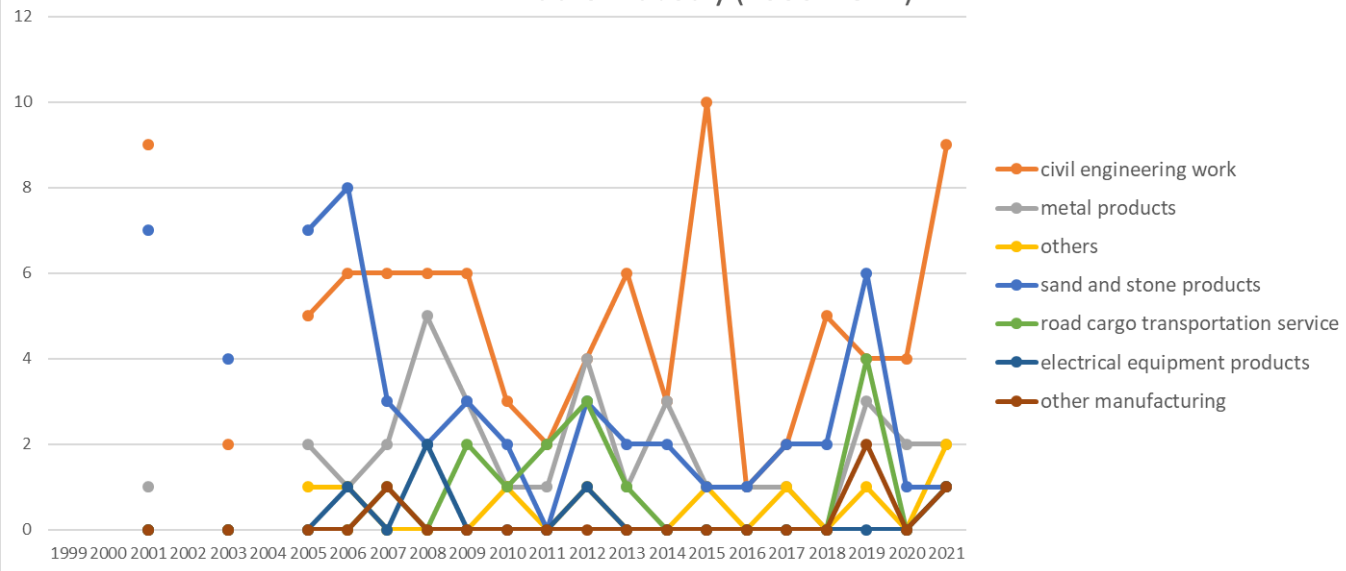


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment (1999-2021)



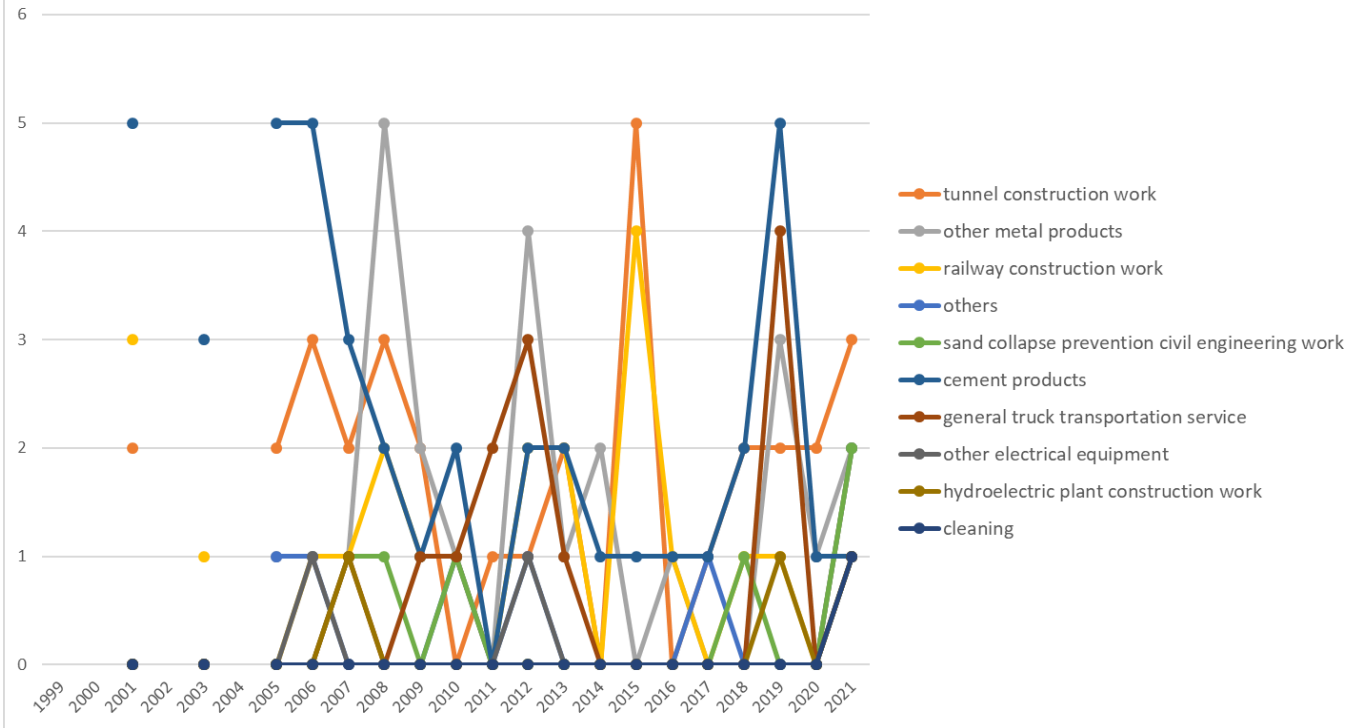
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway equipment in Large industry (1999-2021)

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. 223 railway equipment 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. 223 railway equipment in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway 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
03	construction			9		3		6	8	7	7	6	5	9	4	8	6	14	2	3	6	5	6	9	123	construction
01	manufacturing			17		11		14	21	15	24	14	6	11	13	12	13	7	7	6	6	16	8	5	226	manufacturing
17	others							2	1				1		1			1		1		1		2	10	others
04	transportation service			3		5		4	4	4	4	4	2	3	3	5	2	1	2	3	1	5		1	56	transportation service
05	cargo handling service			1		2		1		3					3		2	1		1		1	1		16	cargo handling service
06	agriculture					2								1	1	2	1				3	1	1		12	agriculture
14	hotel/restaurant/amusement service			2		1			1		1		1					1		1		1			9	hotel/restaurant/amusement service

08	commerce						1			1					1			1		2		1		7	commerce	
02	mining			1		2		1												1				5	mining	
15	commercial cleaning and livestock process					2								1					1			1		5	commercial cleaning and livestock process	
09	financial business/advertisement														1							1		2	financial business/advertisement	
12	education/research service															1	1							2	education/research service	
13	health and hygiene service																							1	health and hygiene service	
07	livestock/fishery																								livestock/fishery	
10	movie/play service																								movie/play service	
11	telecommunication service																								telecommunication service	
16	public office																								public office	
	total			33		28		29	36	29	37	24	15	24	26	28	25	26	13	16	19	31	18	17	474	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway 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
0301	civil engineering work			9		2		5	6	6	6	6	3	2	4	6	3	10	1	2	5	4	4	9	93	civil engineering work
0112	metal products			1				2	1	2	5	3	1	1	4	1	3	1	1	1		3	2	2	34	metal products
1702	others							1	1				1		1			1		1		1		2	9	others
0109	sand and stone products			7		4		7	8	3	2	3	2		3	2	2	1	1	2	2	6	1	1	57	sand and stone products
0403	road cargo transportation service									1		2	1	2	3	1						4		1	15	road cargo transportation service
0114	electrical equipment products								1		2				1									1	5	electrical equipment products
0117	other manufacturing									1												2		1	4	other manufacturing

0401	railroad/water transportation/airline service			3		5		4	4	3	4	2	1	1		4	2	1	2	3	1	1			41	railroad/water transportation/airline service
0110	steel making			4		1		1	2	4	4	1	3		2	3	5	2	2	1			1		36	steel making
0115	transport equipment products			2		5		1	5		2	2		1		2	1	2	2	1	1		1		28	transport equipment products
0113	machine products					1		1	2	1	4	1		3	1	1					1				16	machine products
0303	other construction works					1		1	2		1		2	2		1	2	2		1	1				16	other construction works
0302	construction work									1				5		1	1	2	1			1	2		14	construction work
0501	land cargo handling service			1		2				3					2		2	1		1		1	1		14	land cargo handling service
0104	wood products			1				2		3		2		2				1					1		12	wood products
0108	chemical products									1	2			2		1	1		1		1	1			10	chemical products
0101	food products			1											2	2				1		2			8	food products
0601	agriculture													1	1	2	1				1	1	1		8	agriculture
0106	pulp/paper processing products									1		2	1		1						1		1		7	pulp/paper processing products
1403	other amusement service			1		1			1		1		1							1		1			7	other amusement service
1501	commercial cleaning and livestock process					2									1					1			1		5	commercial cleaning and livestock process
0111	nonferrous metal making										1	1										1	1		4	nonferrous metal making
0602	forestry					2															2				4	forestry
0802	retail							1			1									1		1			4	retail
0107	printing/bookbinding								1					1		1									3	printing/bookbinding

0203	other mining				1		1											1			3	other mining
0102	textile products			1														1			2	textile products
0502	harbor transportation service						1						1								2	harbor transportation service
0804	other commerce												1					1			2	other commerce
0901	financial business												1					1			2	financial business
1201	education/research service													1	1						2	education/research service
1401	hotel			1										1							2	hotel
0201	coal mining			1																	1	coal mining
0202	quarrying				1																1	quarrying
0801	wholesale														1						1	wholesale
1302	social welfare facility								1												1	social welfare facility
1701	dispatch service						1														1	dispatch service
0103	fiber products																					fiber products
0105	furniture																					furniture
0116	electric/gas/water service																					electric/gas/water service
0402	road passenger transport service																					road passenger transport service
0404	other transportation service																					other transportation service
0701	livestock																					livestock
0702	fishery																					fishery
0803	haircut/beauty salon																					haircut/beauty salon
0902	advertisement and mediator																					advertisement and mediator

1001	movie/play service																									movie/play service
1101	telecommunication service																									telecommunication service
1301	medical treatment service																									medical treatment service
1303	other health and hygiene service																									other health and hygiene service
1402	restaurant																									restaurant
1601	public office																									public office
	total			33		28		29	36	29	37	24	15	24	26	28	25	26	13	16	19	31	18	17	474	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 223 railway 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
030102	tunnel construction work			2				2	3	2	3	2		1	1	2		5		1	2	2	2	3	33	tunnel construction work
011209	other metal products							1	1	1	5	2	1		4	1	2		1			3	1	2	25	other metal products
030104	railway construction work			3		1			1	1	2	1	1		2	2		4	1		1	1		2	23	railway construction work
170209	others							1	1				1		1					1				2	7	others
030108	sand collapse prevention civil engineering work									1	1		1									1		2	6	sand collapse prevention civil engineering work
010901	cement products			5		3		5	5	3	2	1	2		2	2	1	1	1	1	2	5	1	1	43	cement products
040301	general truck transportation service									1		1	1	2	3	1						4		1	14	general truck transportation service
011409	other electrical equipment								1						1									1	3	other electrical equipment
030101	hydroelectric plant construction work									1												1		1	3	hydroelectric plant construction work
011703	cleaning																							1	1	cleaning

030106	road construction work																					1	1	road construction work	
040101	railroad service			3		5		4	4	3	4	2	1	1		4	2	1	2	3	1	1		41	railroad service
011001	steel/iron/rolling products			2					1	2	3		2		2	3	2		2	1			1	21	steel/iron/rolling products
011002	casting products			2		1		1	1	2	1	1					3	2						14	casting products
011301	machine products					1		1	2	1	2	1		3	1	1					1			14	machine products
050101	land cargo handling service			1		2				3					2		2	1		1		1	1	14	land cargo handling service
030199	other civil engineering work			2				2				1			1	1	3	1			1			12	other civil engineering work
011502	auto mobile products					1			3		1	1			1		1	1	1					10	auto mobile products
011501	ship building			1		2		1				1				1		1		1		1		9	ship building
030309	other construction works							1	1		1		2	1		1	1				1			9	other construction works
011204	metal plating products			1				1		1		1		1		1	1		1					8	metal plating products
030201	steel frame/reinforced concrete house construction work										1				5		1					1		8	steel frame/reinforced concrete house construction work
060101	agriculture												1	1	2	1					1	1	1	8	agriculture
010401	lumbering							2		2		1					1					1		7	lumbering
030110	water supply/sewage construction work			1		1		1	1			1											2	7	water supply/sewage construction work
010909	other sand and stone products					1		1	1			1			1							1		6	other sand and stone products
011503	railway vehicle products			1					2					1		1		1						6	railway vehicle products
010109	other foods													2	2							1		5	other foods
010602	paper processing products										2			1							1		1	5	paper processing products
010903	pottery products			1				1	2							1								5	pottery products
030209	other building construction work															1	2	1				1		5	other building construction work
	other lumber and wood																								other lumber and wood



010409	products			1					1	1		1										4	products			
010801	non organic or organic chemical products								1												1		4	non organic or organic chemical products		
030109	land consolidation civil engineering work								1			1										1	4	land consolidation civil engineering work		
030301	electricity/telecommunication work								1							2						1	4	electricity/telecommunication work		
060201	lumbering					2																2	4	lumbering		
080209	other retails							1			1											1	1	4	other retails	
140301	golf course			1					1		1											1		4	golf course	
010701	printing service								1					1										3	printing service	
010905	other ceramic products			1							1											1		3	other ceramic products	
011509	other transport equipment products					2					1													3	other transport equipment products	
011709	other manufacturing									1												2		3	other manufacturing	
020309	other mining					1		1															1		3	other mining
030107	river civil engineering work			1						1				1											3	river civil engineering work
030302	machinery/apparatus setting work					1								1											3	machinery/apparatus setting work
010101	meat/dairy products			1																			1		2	meat/dairy products
010804	petroleum/coal products														1	1									2	petroleum/coal products
010805	plastics products										1											1			2	plastics products
011109	other nonferrous metal products																						1	1	2	other nonferrous metal products
011403	electronics equipment and telecommunications apparatus										2														2	electronics equipment and telecommunications apparatus











