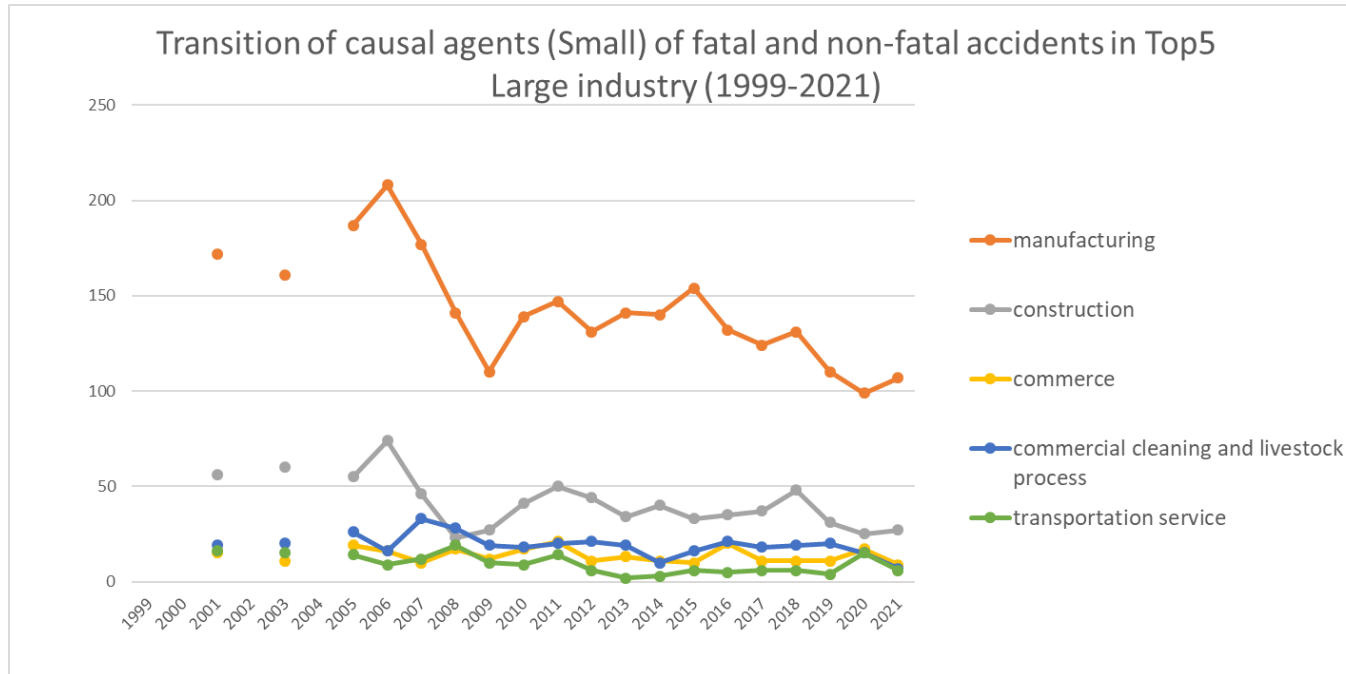
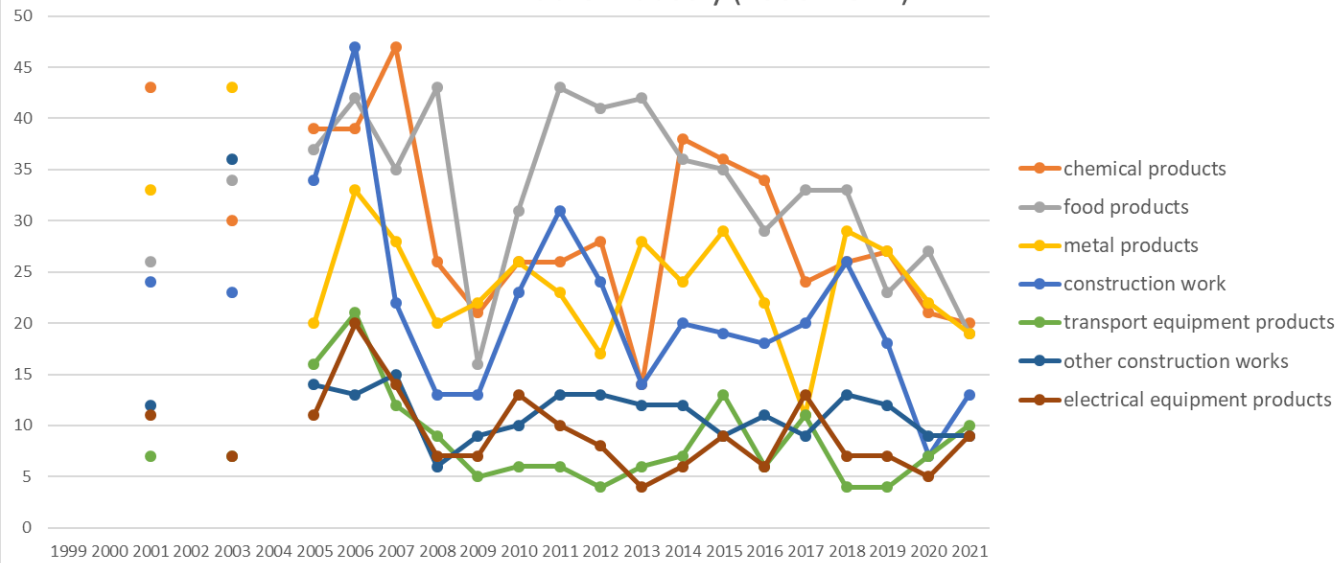


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 514 harmful substance (1999-2021)



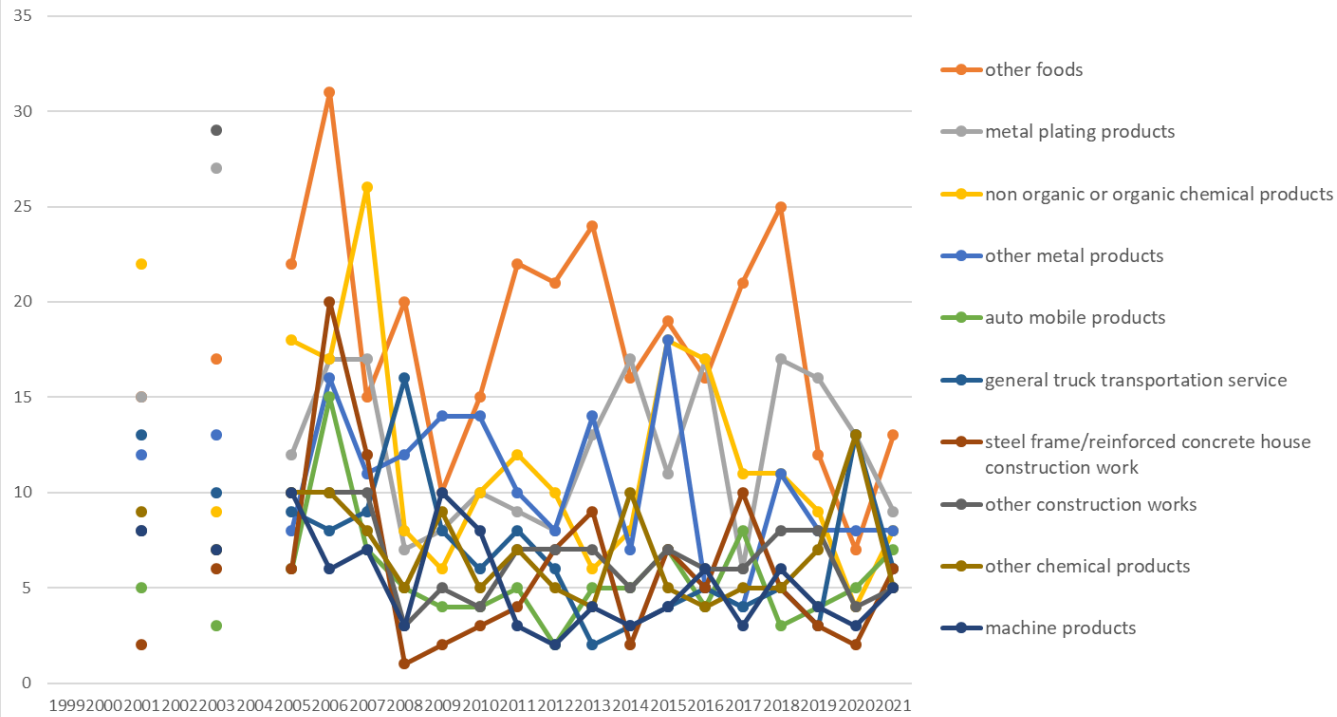
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 514 harmful substance in Large industry (1999-2021)

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. 514 harmful substance 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. 514 harmful substance in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 514 harmful substance 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			172		161		187	208	177	141	110	139	147	131	141	140	154	132	124	131	110	99	107	2,711	manufacturing
03	construction			56		60		55	74	46	23	27	41	50	44	34	40	33	35	37	48	31	25	27	786	construction
08	commerce			15		11		19	16	10	17	12	17	21	11	13	11	10	20	11	11	11	17	9	262	commerce
15	commercial cleaning and livestock process			19		20		26	16	33	28	19	18	20	21	19	10	16	21	18	19	20	15	7	365	commercial cleaning and livestock process
04	transportation service			16		15		14	9	12	19	10	9	14	6	2	3	6	5	6	6	4	15	6	177	transportation service
13	health and hygiene service			17		6		7	16	5	8	10	9	4	8	6	7	7	6	9	9	8	1	6	149	health and hygiene service
	hotel/restaurant/amusement																									hotel/restaurant/amusement

14	service			15	14		19	16	15	18	12	16	18	19	19	8	26	15	19	14	13	8	4	288	service
17	others			9	10		5	18	7	6	7	4	10	5	5	3	15	6	4	9	7	8	4	142	others
07	livestock/fishery			1	1		2	1	4	2	1	3	4	4	4	3	7	5	1	7	3		2	55	livestock/fishery
06	agriculture			3			2			1	2		2	3		1	3	1	2	1	1	1	2	25	agriculture
12	education/research service			1	5		5	3	5	5	4	5	3	1	3	2	1	3	4	3	3	2	1	59	education/research service
09	financial business/advertisement			2				1						1		1			1		1		1	8	financial business/advertisement
05	cargo handling service			3	3			2	6	4			1	1	12	1			1	1	1	1		37	cargo handling service
02	mining			1	1							1							1					4	mining
11	telecommunication service											1						1						2	telecommunication service
10	movie/play service											1												1	movie/play service
16	public office																								public office
	total			330	307		341	380	320	272	214	264	294	255	258	230	278	250	238	259	213	192	176	5,071	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 514 harmful substance 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
0108	chemical products			43		30		39	39	47	26	21	26	26	28	14	38	36	34	24	26	27	21	20	565	chemical products
0101	food products			26		34		37	42	35	43	16	31	43	41	42	36	35	29	33	33	23	27	19	625	food products
0112	metal products			33		43		20	33	28	20	22	26	23	17	28	24	29	22	11	29	27	22	19	476	metal products
0302	construction work			24		23		34	47	22	13	13	23	31	24	14	20	19	18	20	26	18	7	13	409	construction work
0115	transport equipment products			7		7		16	21	12	9	5	6	6	4	6	7	13	6	11	4	4	7	10	161	transport equipment products
0303	other construction works			12		36		14	13	15	6	9	10	13	13	12	12	9	11	9	13	12	9	9	237	other construction works
0114	electrical equipment products			11		7		11	20	14	7	7	13	10	8	4	6	9	6	13	7	7	5	9	174	electrical equipment products

1501	commercial cleaning and livestock process			19		20		26	16	33	28	19	18	20	21	19	10	16	21	18	19	20	15	7	365	commercial cleaning and livestock process
0113	machine products			10		8		14	11	14	4	12	12	8	3	5	7	7	7	5	6	5	5	7	150	machine products
0403	road cargo transportation service			13		13		12	9	10	18	10	7	12	6	2	3	4	5	5	6	4	15	6	160	road cargo transportation service
0117	other manufacturing			11		5		12	12	9	11	10	6	9	7	19	5	4	8	10	7	5	4	5	159	other manufacturing
0301	civil engineering work			20		1		7	14	9	4	5	8	6	7	8	8	5	6	8	9	1	9	5	140	civil engineering work
0802	retail			7		6		9	11	7	11	9	13	13	8	10	5	8	14	3	8	10	12	4	168	retail
1702	others			9		8		5	16	5	6	7	4	10	4	5	3	14	5	4	8	7	8	4	132	others
0111	nonferrous metal making			6		5		13	3	3	4	4	3	9	4	4	4	3	6		4		1	4	80	nonferrous metal making
0106	pulp/paper processing products			5		2		2	5	3	1		6	1	1	3	3	2	3	6	5			4	52	pulp/paper processing products
0110	steel making			3		3		8	4	4	6	4	2	3	6	3	3	5	3	5	3	6	1	3	75	steel making
1301	medical treatment service			12		4		3	10	3	2	5	4	3	1	2	4	4	3	2	1	1		3	67	medical treatment service
0109	sand and stone products			3		6		7	6	5	6	3	2	4		1	2	3	3	3	3	4	2	3	66	sand and stone products
1302	social welfare facility			1		2		3	4	2	5	5	4	1	5	3	3	2	1	4	6	6	1	3	61	social welfare facility
1402	restaurant			9		9		10	14	11	11	6	12	12	15	13	3	22	12	15	11	9	5	2	201	restaurant
0701	livestock			1		1		1	1	3	2	1	3	4	4	4	3	6	5	1	6	3		2	51	livestock
0801	wholesale			3		3		6	1	2	5		2	4	3	2	4	1	2	6	3	1		2	50	wholesale
0804	other commerce			2		1		1	2	1		3	1	3		1	2	1	3	1			4	2	28	other commerce
0102	textile products			8		8		4	4	1		4	1	2	7	8	2	4	3		2		1	1	60	textile products
1201	education/research service			1		5		5	3	5	5	4	5	3	1	3	2	1	3	4	3	3	2	1	59	education/research service
1401	hotel			4		4		4	2	2	3	3	3	2	1	5	4	3	1	4	2	2	2	1	52	hotel

1403	other amusement service			2	1	5	2	4	3	1	4	3	1	1	1	2		1	2	1	1	35	other amusement service	
0107	printing/bookbinding			2		1			1	1	2	3	1	2	2	2		2	1	1	1	1	23	printing/bookbinding
0601	agriculture					1			1	2		1	3		1	3		2	1	1	1	1	18	agriculture
0803	haircut/beauty salon			3	1	3	2		1		1	1					1	1			1	1	16	haircut/beauty salon
0104	wood products				1	2	1	1		1		1	2			1		1	1		1	13	wood products	
0103	fiber products			2	1		4						1									1	9	fiber products
0602	forestry			3		1						1				1						1	7	forestry
0901	financial business						1								1				1			1	4	financial business
0501	land cargo handling service			1	3		2	2	1					12				1		1	1		24	land cargo handling service
1303	other health and hygiene service			4		1	2		1		1		2	1		1	2	3	2	1			21	other health and hygiene service
0502	harbor transportation service			2				4	3			1	1		1				1				13	harbor transportation service
0116	electric/gas/water service			1		1	3				2				1	2	1				1		12	electric/gas/water service
0105	furniture			1	1		1	1	2	1			2					1			1		11	furniture
0402	road passenger transport service			3	1			1	1		1	2						1					10	road passenger transport service
1701	dispatch service				2		2	2					1			1	1		1				10	dispatch service
0401	railroad/water transportation/airline service				1	2	1									2							6	railroad/water transportation/airline service
0702	fishery					1	1								1			1					4	fishery
0902	advertisement and mediator			2									1					1					4	advertisement and mediator

011301	machine products			8		7		10	6	7	3	10	8	3	2	4	3	4	6	3	6	4	3	5	102	machine products
011409	other electrical equipment			6		2		8	7	10	1	2	8	4	3	1	2	5	3	6	3	2	3	5	81	other electrical equipment
010101	meat/dairy products			3		9		3	3	7	8	1	7	1	5	8	3	7	8	3	4	6	5	4	95	meat/dairy products
011403	electronics equipment and telecommunications apparatus			4		3		2	7	4	4	4	3	5	3	3	4	4	3	5	3	4	2	4	71	electronics equipment and telecommunications apparatus
030302	machinery/apparatus setting work			3		6		3	2	5	2	3	4	5	4	5	3	1	5	3	4	4	5	4	71	machinery/apparatus setting work
030209	other building construction work			15		10		20	21	3	8	2	10	16	14	3	11	6	5	6	16	8	4	3	181	other building construction work
150101	building maintenance service			8		13		14	3	17	17	12	9	7	10	9	6	10	9	13	11	5	5	3	181	building maintenance service
170209	others			7		6		4	15	2	5	5	3	10	3	5	3	14	4	4	7	6	6	3	112	others
030203	building facility construction work			3		5		7	2	6	3	2	5	7	1	1	2	3	5	2	3	6	1	3	67	building facility construction work
011709	other manufacturing			4		2		4	2	4	8	2	3	4	6	4	3	1	3	6	3	2	2	3	66	other manufacturing
130201	social welfare facility			1		2		3	4	2	5	5	4	1	5	3	3	2	1	4	6	6	1	3	61	social welfare facility
130101	hospital			6		4		2	9	3	1	5	2	2	1	1	3	3	2	2	1			3	50	hospital
010601	pulp/paper			2		2		2	4	2	1		3	1	1	1	1	2	2	4	5			3	36	pulp/paper
010808	painting products			2		1		2	2	2	1	1	2				2	3				1		3	22	painting products
140201	general restaurant			8		7		10	14	9	10	6	10	10	14	13	3	19	11	14	10	8	4	2	182	general restaurant
080209	other retails			2		5		5	7	6	8	7	9	9	4	8	4	7	13	2	6	9	7	2	120	other retails
150102	industrial waste management service			6		1		4	6	6	7	3	6	9	5	5	3	3	5	4	7	10	7	2	99	industrial waste management service
070101	livestock			1		1		1	1	3	2	1	3	4	4	4	3	6	5	1	6	3		2	51	livestock
030199	other civil engineering work			8				1	6	5	2	1	4		3	6	2	2	3	3				2	48	other civil engineering work
011101	nonferrous metals/rolling products			3		3		9	1	1	1	1	3	6	3	3	1	2	3		4			2	46	nonferrous metals/rolling products

011109	products			3		2		1	1		2	3		3	1		2		3			1	1	23	products	
011303	optical instruments			1				2	4	5			2	3	1			1	1	2				1	23	optical instruments
011203	metal press products			5		3					1		2	3	1	1				1		2	1	1	21	metal press products
010701	printing service			2				1			1	1	2	2	1	2	2	1		2	1	1		1	20	printing service
170201	security service			2		2		1	1	3	1	2	1		1				1		1	1	2	1	20	security service
011305	other precision machine products			1		1		1	1	2	1	1	1		1	2	2					1	1	1	18	other precision machine products
060101	agriculture							1			1	2		1	3		1	3		2	1	1	1	1	18	agriculture
010809	chemical fertilizer products			2		2		1	2	1	2						1	1	1				1	1	15	chemical fertilizer products
080302	beauty salon			3		1		3	2				1	1					1	1				1	14	beauty salon
011102	nonferrous metals casting products							3	1	2	1					1	1	1						1	11	nonferrous metals casting products
140301	golf course					1		1		2			1	3	1				1					1	11	golf course
010609	other pulp/paper processing products			2					1										1					1	5	other pulp/paper processing products
010309	other fiber products								3															1	4	other fiber products
011202	screw products			1										1								1		1	4	screw products
010402	plywood							1											1					1	3	plywood
030109	land consolidation civil engineering work			2																				1	3	land consolidation civil engineering work
060201	lumbering			1															1					1	3	lumbering
090103	insurance business								1								1							1	3	insurance business
010905	other ceramic products																							1	1	other ceramic products
010102	fishery products			2		6		4	5	4	5	3	6	5	7	6	11	3		1	2	3	7		80	fishery products
010805	plastics products			2		2		3	4	4	4	3		3	2	2	1	4	5	5	2	4			50	plastics products
011703	cleaning					1		4	6	4	1	3	2	4		6	1		2	3	2	2			41	cleaning

010103	agricultural food products			3		1			1	3	1	2	1	2	1	1	2		2	5		29	agricultural food products			
010209	other textile products					4		1		1		1	6	7		2	1		2			26	other textile products			
030110	water supply/sewage construction work			5					2	1		3	1	1		1	2	1		2	5		1	25	water supply/sewage construction work	
050101	land cargo handling service			1		3			2	2	1					12				1		1	1	24	land cargo handling service	
010901	cement products			1		1		2	1	2	1	2	1	1		1	1	1	2		2	3	1	23	cement products	
140309	other amusement service			2				4			4	3		1	2	1		1	1		1	2	1	23	other amusement service	
030105	bridge construction work								1	1					2	2	1	2			2	1		7	19	bridge construction work
040302	specific truck transportation service					3		2	1	1	1	2	1	3						1	1	1	2		19	specific truck transportation service
140209	other restaurants			1		2				2	1		2	2	1			3	1	1	1	1	1	1	19	other restaurants
010902	glass products			1		2			1	3	1	1	1	2				2	1	2	1				18	glass products
030106	road construction work			3		1				2	2			2	2					2	1	2		1	18	road construction work
030301	electricity/telecommunication work			1		1		1	1		1	1	2	1	2		4	1			1				17	electricity/telecommunication work
010804	petroleum/coal products					1						1			3		9					1	1		16	petroleum/coal products
011402	electrical appliance			1		2		1	4		2		1		1					1	1				14	electrical appliance
011509	other transport equipment products					1		4	2	1	1			1		2	1						1		14	other transport equipment products
010807	leather products			2						2	2	1				1			1	2	1				12	leather products
010602	paper processing products			1						1			3			2	2		1	1					11	paper processing products
130309	other health and hygiene service			4				1	2		1		1					1			1				11	other health and hygiene service
080204	fuel retail			1					1				1	2		1			1	1			2		10	fuel retail
130109	other medical treatment service			4							1		1	1		1	1					1			10	other medical treatment service
130301	bathhouse													2	1				2	3	1	1			10	bathhouse

