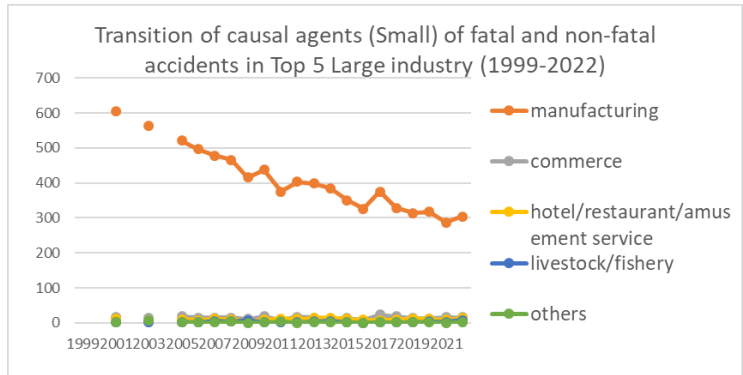
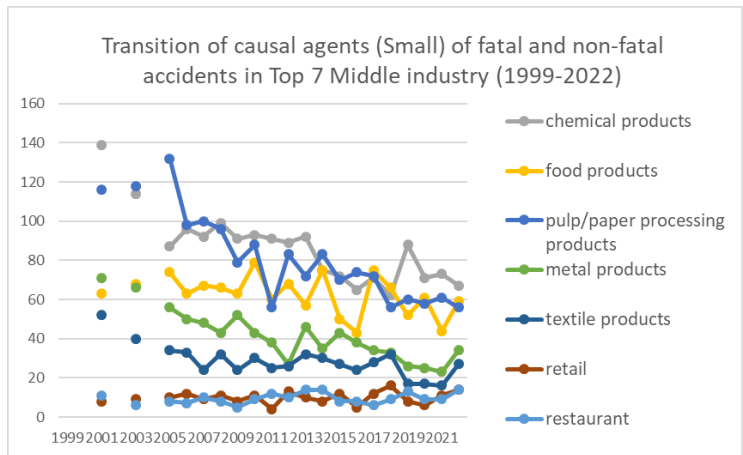


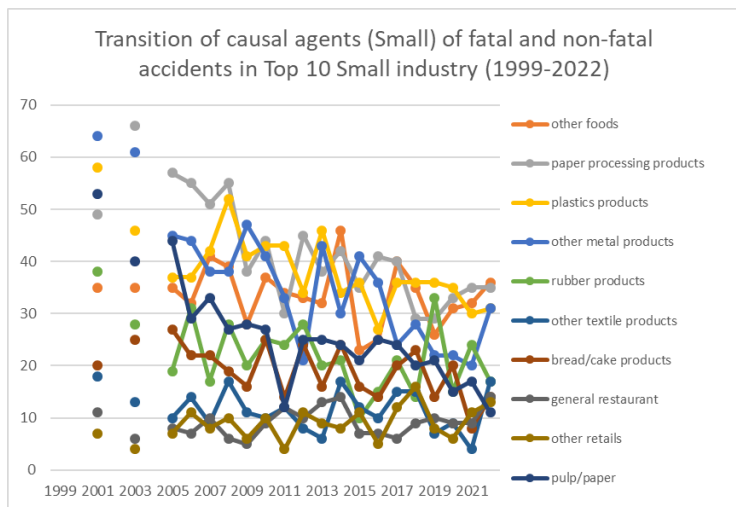
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll machine) (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll machine) in Large industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll machine) in Middle Industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll machine) in Small Industry (1999-2022)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll 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
01	manufacturing			606		564		521	496	478	466	415	438	375	403	398	385	351	326	375	328	314	318	287	304	8,148	manufacturing
08	commerce			16		14		19	15	15	15	11	19	9	17	15	12	14	8	23	19	14	12	16	16	299	commerce
14	hotel/restaurant/amusement service			11		6		10	7	11	10	5	9	13	11	14	15	11	9	8	9	13	11	9	14	206	hotel/restaurant/amusement service
07	livestock/fishery			3		3		3	2	5	4	8	1	2	1	4	5	1		2	1	1	4	3	7	60	livestock/fishery
17	others			3		7		3	1	2	4		2	4		3	2	2		1	1	3	2		3	43	others
13	health and hygiene service			1				1	1	1	2		3			2		1	2	2	1	2		1	3	23	health and hygiene service
03	construction			2		2		3	4	8	3	1	5	6	1	2	1	2	1	1	2	3	1	1	2	51	construction
15	commercial cleaning and livestock process					3		3	1	1	2	1		3	3	1	1	3		1	4	3		2	1	33	commercial cleaning and livestock process
06	agriculture			1										1	1					2		1			1	7	agriculture
04	transportation service			1		3			4	8	3	4	1	1	1	1	2		1	1		1	2	1		35	transportation service
12	education/research service			1				1	1				1	1	1				1			1	3	1		12	education/research service
05	cargo handling service			1				1						1			1					2	1			7	cargo handling service
02	mining							1																		1	mining
09	financial business/advertisement																			1						1	financial business/advertisement
10	movie/play service											1														1	movie/play service
11	telecommunication service																										telecommunication service
16	public office																										public office
	total			646		602		566	532	529	509	446	479	416	439	440	424	385	348	417	365	358	354	321	351	8,927	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 163 roll machine (except printingroll 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
0108	chemical products			139		114		87	96	92	99	91	93	91	89	92	75	72	65	71	62	88	71	73	67	1,727	chemical products

010899	other chemical products			14		15		17	11	9	8	8	5	14	11	6	6	11	10	2	3	6	11	4	8	179	other chemical products
010701	printing service			11		7		10	10	11	10	12	11	11	8	8	4	5	7	11	10	5	5	10	7	173	printing service
010204	dyeing			20		20		15	11	7	6	8	15	5	11	17	8	9	7	11	11	7	3	7	6	204	dyeing
011301	machine products			11		13		10	12	9	5	4	5	7	13	5	6	9	7	6	9	4	6	5	6	152	machine products
011502	auto mobile products			8		10		8	12	13	8	4	2	8	8	6	4	5	3	6	4	7	6	2	5	129	auto mobile products
011709	other manufacturing			38		34		22	20	18	15	17	7	12	15	10	13	19	11	16	14	9	16	15	4	325	other manufacturing
011703	cleaning			8		12		11	12	8	9	10	12	8	10	5	5	5	9	5	3	7	8	7	4	158	cleaning
011001	steel/iron/rolling products			10		9		3	6	12	7	9	4	6	5	2	4	5	6	5	4	7	4	4	4	116	steel/iron/rolling products
010102	fishery products			5		4		8	5	4	3	13	7	6	9	4	3	3	3	6	5	6	7	3	4	108	fishery products
070201	fishery			2		3		3	2	4	3	8		2		3	3	1		1	1	1	3	3	4	47	fishery
010402	plywood			9		9		15	11	8	12	7	10	4	6	3	6	3	3	4	6	3	6	3	3	131	plywood
010801	non organic or organic chemical products			8		5		5	3	7	4	9	6	1	6	5	4	2	2	1	2	4	2	6	3	85	non organic or organic chemical products
011101	nonferrous metals/rolling products			7		7		7	4	9	5	6	1	4	1	2	4	5	3	5	2	2	6	2	3	85	nonferrous metals/rolling products
010309	other fiber products			8		6		7	3	7	4		3	2	4	5	3	2	2	5	2	3	2	4	3	75	other fiber products
010802	chemical fiber			9		4		4	8	3	5	2	3	2	6	3	3	3	3	1	3	6	4	3	75	chemical fiber	
010807	leather products			7		8		4	3	4	4	2	7	2	3	2	4	6	4	3	3	2		2	3	73	leather products
011403	electronics equipment and telecommunications apparatus			1		2			2	4	3	3	5	3	1	1	2	4		2	4		1	2	3	43	electronics equipment and telecommunications apparatus
170209	others			2		4		3	1	2	4		2	3		3	2	1				3	1		3	34	others
130201	social welfare facility							1		1	2		3			2		1	2	2	1	2		1	3	21	social welfare facility
070101	livestock			1							1		1				1			1					3	8	livestock
010409	other lumber and wood products			8		9		4	14	6	3	9	6	3	5	5	4	4	8	3	2	1	1	6	2	103	other lumber and wood products
080109	other wholesale			5		2		6	2	5	1	3	7	5	2	4	4	2	2	10	3	6	4	3	2	78	other wholesale
010501	wood furniture			8		2		5	3	7	3	1	1	6	1	5	4	2	2	2	3	2	3	2	2	64	wood furniture
011203	metal press products			5		5		6	4	6	4	3	2	2	3	1	4		1	6	3	2	3	1	2	63	metal press products
010202	cotton-spinning			5		3		3	1	4	5	1	2	1	3	5	1	2	1	2	3	1	1	1	2	47	cotton-spinning
010103	agricultural food products			1		3			2			3	4	5		2	2	1	3		5	2	1	2	1	39	agricultural food products
010101	meat/dairy products							2				2	2	5	5		2	1	5	1	3	1	5		2	36	meat/dairy products
010803	pharmaceuticals			1		3		1	2	4		2		2	3	4	1	1		3	1	2		1	2	33	pharmaceuticals
010401	lumbering					1		2	3		3		2	1	3	1		1	1	2		1	2		2	25	lumbering
010702	bookbinding			1				1		1		2	1	2	1	2	2		1	1		2			2	19	bookbinding
011009	other steel products			8		4		6	6	7	5	2	5	5	5	6	6	2	1	2	4	3	1	2	1	81	other steel products
010203	weaving			7		4		6	6	4	4	4	3	5	2	4	4	3	5		2	2	3	3	1	72	weaving
011109	other nonferrous metal products			4		4		7	7		6	3	7	2	6	6	1	5	3	2	2		1		1	67	other nonferrous metal products
011409	other electrical equipment			3		7		2	7	7	3	2	3	4	4	5	3		4	3	2	1	1	1	1	63	other electrical equipment
010909	other sand and stone products			5				1	7	4	2	4	3	2	2	5	2	3	1	4	3	2	5		1	56	other sand and stone products
010709	other printing and bookbinding			2		1		5	1	2	3	3	3	2	1	1	5	3	2	1	1		3	1	1	41	other printing and bookbinding

010901	cement products			4				2	4	1	2		1	1		2		1	1	1	1	3	1	1	1	27	cement products
010503	fittings			4		2		2	1		4		2	3			4	1				1			1	25	fittings
011305	other precision machine products			1				2			2	1		1		1			2		1	2	1	1	16	other precision machine products	
080201	all kinds of retail			1		4		2	1			2	1		2	1		1						1	16	all kinds of retail	
150102	industrial waste management service					1		1			1	1		3	2		1	2			1			1	15	industrial waste management service	
010201	silk-reeling			2					1					2	2			1	1		1			1	13	silk-reeling	
011204	metal plating products							1	1	2	1	1		3			1	2							1	13	metal plating products
030309	other construction works							1	1	1			3	4								1			1	12	other construction works
010301	over/under wear			1						1		1		2		1							1	1	1	9	over/under wear
030302	machinery/apparatus setting work					1		1		2			1		1					1		1			1	9	machinery/apparatus setting work
060101	agriculture			1										1	1						2		1		1	7	agriculture
010105	alcoholic drinks			1										1		1					1				1	5	alcoholic drinks
011701	auto mobile servicing																						1		1	2	auto mobile servicing
011601	electric utility service																								1	1	electric utility service
010902	glass products					4		1	3	5	5	1	3	2	1	4	2	1	3	1						36	glass products
010509	other furniture			1		6			4	1	3	4	2	2	2	1					1	1	1			29	other furniture
040301	general truck transportation service			1		2			2	8	3	3	1		1	1			1	1			2	1		27	general truck transportation service
010808	painting products			2		3		1	3			1	2	1		1	1	2	2		2	1	1	1		24	painting products
010809	chemical fertilizer products			1		1		2	1			2	1	1	1	1		2	1		1		1			17	chemical fertilizer products
011402	electrical appliance					2			1	1	2		2	1	2	1			1	2		1	1			17	electrical appliance
011201	western tableware/cutting tool products			2				2		1		1			2	1				1	2	1		2		15	western tableware/cutting tool products
011509	other transport equipment products			1						1	2		1		1	2	1	3		2						14	other transport equipment products
010804	petroleum/coal products			1		1		1	1	1		1	2		1	1		1		1			1			13	petroleum/coal products
010903	pottery products			2		1		1		1			2	1	3							2				13	pottery products
120109	other education/research service			1				1	1					1	1	1			1			1	3	1		12	other education/research service
011202	screw products							2	1	1					1	1			1	3		1				11	screw products
140101	hotel							1			2			1			3		2			2				11	hotel
030203	building facility construction work					1		1	1	1	1				1			1		2		1				10	building facility construction work
080409	other commerce			1		1		2	1				1			1		1				1	1			10	other commerce
030209	other building construction work								1	4		1	1			1		1								9	other building construction work
080401	warehousing					2		1		1	1				2				1			1				9	warehousing
150109	other cleaning and livestock process service								1		1					1		1		1	3	1				9	other cleaning and livestock process service
140209	other restaurants										2					1		1	1			3				8	other restaurants
010106	soft drinks			1		1		2	2														1			7	soft drinks
011401	heavy electrical equipment					1		1				1	1								2		1			7	heavy electrical equipment

