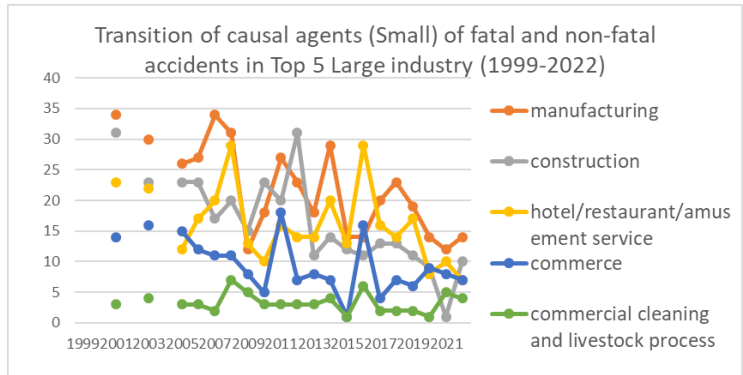
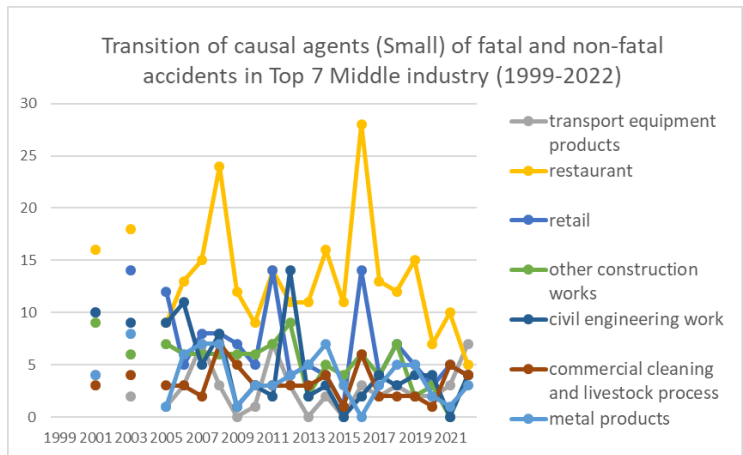


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 513 inflammable gas (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 513 inflammable gas in Large industry (1999-2022)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 513 inflammable gas in Middle Industry (1999-2022)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-------------------------------------------|--|--|----|--|----|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|-------|-------------------------------------------|
| 0115 | transport equipment products | | | 4 | | 2 | | 1 | 3 | 7 | 3 | | 1 | 7 | 3 | | 2 | | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 55 | products |
| 1402 | restaurant | | | 16 | | 18 | | 9 | 13 | 15 | 24 | 12 | 9 | 14 | 11 | 11 | 16 | 11 | 28 | 13 | 12 | 15 | 7 | 10 | 5 | 269 | restaurant |
| 0802 | retail | | | 10 | | 14 | | 12 | 5 | 8 | 8 | 7 | 5 | 14 | 4 | 5 | 4 | 1 | 14 | 4 | 7 | 5 | 3 | 5 | 4 | 139 | retail |
| 0303 | other construction works | | | 9 | | 6 | | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 9 | 2 | 5 | 4 | 6 | 4 | 7 | 2 | 3 | | 4 | 105 | other construction works |
| 0301 | civil engineering work | | | 10 | | 9 | | 9 | 11 | 5 | 8 | 1 | 3 | 2 | 14 | 2 | 3 | | 2 | 4 | 3 | 4 | 4 | | 4 | 98 | civil engineering work |
| 1501 | commercial cleaning and livestock process | | | 3 | | 4 | | 3 | 3 | 2 | 7 | 5 | 3 | 3 | 3 | 3 | 4 | 1 | 6 | 2 | 2 | 2 | 1 | 5 | 4 | 66 | commercial cleaning and livestock process |
| 0112 | metal products | | | 4 | | 8 | | 1 | 6 | 7 | 7 | 1 | 3 | 3 | 4 | 5 | 7 | 3 | | 3 | 5 | 5 | 2 | 1 | 3 | 78 | metal products |
| 0403 | road cargo transportation service | | | 1 | | 3 | | 3 | 3 | 1 | 2 | 1 | 1 | 5 | 3 | 1 | | 2 | 1 | 3 | 3 | 3 | 3 | | 3 | 42 | road cargo transportation service |
| 0302 | construction work | | | 12 | | 8 | | 7 | 6 | 6 | 6 | 8 | 14 | 11 | 8 | 7 | 6 | 8 | 3 | 5 | 3 | 5 | 2 | 1 | 2 | 128 | construction work |
| 1401 | hotel | | | 5 | | 3 | | 2 | 4 | 5 | 4 | 1 | | 2 | 2 | 2 | | 1 | | 1 | 2 | | | 2 | 36 | hotel | |
| 0804 | other commerce | | | 2 | | | | 1 | 3 | 1 | | 1 | | 4 | 2 | 2 | 3 | | | | | | | | 2 | 21 | other commerce |
| 1301 | medical treatment service | | | | | 1 | | | 2 | 1 | 1 | | | | | | 1 | 1 | | 1 | | | | 1 | | 11 | medical treatment service |
| 0117 | other manufacturing | | | 10 | | 3 | | 6 | 3 | 2 | 4 | 3 | 8 | 3 | 6 | 1 | 5 | 2 | 2 | 5 | 5 | 2 | 1 | | 1 | 72 | other manufacturing |
| 0108 | chemical products | | | 3 | | 4 | | 5 | 2 | | 1 | 5 | 3 | 4 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 1 | | 3 | 1 | 46 | chemical products |
| 0110 | steel making | | | 2 | | 1 | | 1 | | 5 | 3 | 1 | | 1 | | 2 | 9 | 2 | | 3 | 1 | 1 | 1 | | 1 | 34 | steel making |
| 1702 | others | | | 5 | | 3 | | 2 | 1 | | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 4 | | 4 | | 1 | 34 | others |
| 0801 | wholesale | | | 2 | | 2 | | 2 | 3 | 2 | 3 | | | | 1 | 1 | | | 2 | | | 1 | 6 | 3 | 1 | 29 | wholesale |
| 0113 | machine products | | | | | 5 | | 2 | 3 | 3 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | | 1 | | 1 | 27 | machine products |
| 0501 | land cargo handling service | | | | | 1 | | 1 | | | | | | | | | | | | | | | | 1 | 1 | 4 | land cargo handling service |
| 0101 | food products | | | 6 | | 4 | | 8 | 6 | 4 | 8 | 1 | 2 | 4 | 6 | 2 | 1 | 3 | 4 | 3 | | 3 | 3 | 1 | | 69 | food products |
| 0116 | electric/gas/water service | | | 4 | | | | 1 | 2 | 5 | | | 1 | 3 | 1 | | 2 | | 1 | 1 | | 1 | 2 | 1 | | 25 | electric/gas/water service |
| 1302 | social welfare facility | | | 1 | | 1 | | 1 | 2 | 1 | 3 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | 1 | 2 | | | 21 | social welfare facility |
| 1403 | other amusement service | | | 2 | | 1 | | 1 | | | 1 | | 1 | | 1 | 1 | 4 | 1 | 1 | 3 | 1 | | 1 | | | 19 | other amusement service |
| 0111 | nonferrous metal making | | | 1 | | 1 | | | 2 | | | | | | 1 | | | 1 | | | 2 | 4 | | 2 | | 14 | nonferrous metal making |
| 0109 | sand and stone products | | | | | 1 | | 1 | | | 3 | | | | | 3 | 1 | | | | | | 1 | | | 10 | sand and stone products |
| 0402 | road passenger transport service | | | 2 | | | | | 1 | 1 | | | | | | 1 | | | | | | | | | | 8 | road passenger transport service |
| 1201 | education/research service | | | 1 | | 1 | | | 1 | | | | | | | | 4 | | | | 1 | | | | | 8 | education/research service |
| 1303 | other health and hygiene service | | | 1 | | | | 1 | | 5 | | | | | | | | | | | | | 1 | | | 8 | other health and hygiene service |
| 0106 | pulp/paper processing products | | | | | | | | | | | | 1 | | | | | 1 | | | | | 1 | 1 | | 4 | pulp/paper processing products |
| 0702 | fishery | | | | | 3 | | 1 | | | | | | | | | | | | | | | | | | 4 | fishery |
| 0901 | financial business | | | | | | | | | | | 1 | | | | 1 | | | | | | | | 2 | | 4 | financial business |

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| 140101 | hotel | | | 5 | | 3 | | 2 | 4 | 5 | 4 | 1 | | 2 | 2 | 2 | | 1 | | | 1 | 2 | | | 2 | 36 | hotel | |
| 040301 | general truck transportation service | | | 1 | | 2 | | 2 | 3 | 1 | 2 | 1 | | 5 | | 1 | | 2 | 1 | 3 | 2 | 2 | 2 | | 2 | 32 | general truck transportation service | |
| 080204 | fuel retail | | | 2 | | 4 | | 5 | | 2 | 1 | 1 | | 1 | 1 | | 2 | | 1 | 1 | 3 | | 1 | | 2 | 27 | fuel retail | |
| 080409 | other commerce | | | 2 | | | | | 2 | 1 | | 1 | | 4 | 1 | 2 | 3 | | | | | | | | 2 | 18 | other commerce | |
| 011502 | auto mobile products | | | 1 | | | | | 1 | | 1 | | | 3 | | | 1 | | 1 | | 1 | | | | 2 | 11 | auto mobile products | |
| 130109 | other medical treatment service | | | | | | | | | | | | | | | | 1 | | 1 | | | | | | 2 | 4 | other medical treatment service | |
| 030199 | other civil engineering work | | | 5 | | 6 | | 5 | 5 | 3 | 1 | | 2 | 1 | 3 | 1 | 3 | | 2 | 1 | 2 | 2 | 3 | | 1 | 46 | other civil engineering work | |
| 011701 | auto mobile servicing | | | 6 | | 2 | | 4 | 2 | 1 | 3 | 1 | 5 | 1 | 5 | | 3 | 1 | 1 | 3 | 3 | 1 | | | 1 | 43 | auto mobile servicing | |
| 170209 | others | | | 4 | | 3 | | 2 | 1 | | | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 4 | | 4 | | 1 | 31 | others | |
| 080109 | other wholesale | | | 2 | | 2 | | 2 | 2 | 2 | 3 | | | | 1 | 1 | | | 2 | | | 1 | 6 | 3 | 1 | 28 | other wholesale | |
| 011001 | steel/iron/rolling products | | | 2 | | 1 | | | | 5 | 3 | | | 1 | | 1 | 7 | | | 2 | 1 | | | | 1 | 24 | steel/iron/rolling products | |
| 011301 | machine products | | | | | 2 | | 2 | 3 | 3 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | 3 | | 1 | | 1 | 21 | machine products | |
| 030106 | road construction work | | | 3 | | 3 | | 4 | 2 | 1 | 1 | | | | 4 | | | | | | | | 1 | | | 1 | 20 | road construction work |
| 010805 | plastics products | | | | | 2 | | | | | | | | | | | | | | | | | | | | 1 | 12 | plastics products |
| 011509 | other transport equipment products | | | | | 1 | | 1 | | | | 1 | | | | | | | 1 | 1 | | | 1 | 1 | 1 | 8 | other transport equipment products | |
| 030102 | tunnel construction work | | | | | | | | | | | | | | | 5 | | | | | | | | | | 1 | 8 | tunnel construction work |
| 050101 | land cargo handling service | | | | | 1 | | 1 | | | | | | | | | | | | | | | | | 1 | 1 | 4 | land cargo handling service |
| 030107 | river civil engineering work | | | | | | | | | | | | | | | | | | | | 1 | | | | | 1 | 2 | river civil engineering work |
| 040303 | cargo/ light automobile transportation service | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | cargo/ light automobile transportation service | |
| 030209 | other building construction work | | | 2 | | 1 | | 3 | 3 | 2 | 1 | 7 | 5 | 4 | 4 | 1 | 4 | 4 | | 2 | 1 | 1 | 1 | | | 46 | other building construction work | |
| 010109 | other foods | | | 4 | | 2 | | 3 | 3 | 4 | 6 | 1 | 2 | 2 | 5 | 2 | | | 2 | 3 | | 2 | 3 | | | 44 | other foods | |
| 030203 | building facility construction work | | | 5 | | 3 | | 1 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 4 | 1 | | 3 | 1 | | 1 | | 1 | | 36 | building facility construction work | |
| 130201 | social welfare facility | | | 1 | | 1 | | 1 | 2 | 1 | 3 | 1 | 2 | 1 | | 1 | 1 | 1 | | 1 | 1 | 2 | | | 21 | social welfare facility | | |
| 010104 | bread/cake products | | | 1 | | 2 | | 5 | 2 | | 2 | | | | 1 | | | 1 | 2 | 2 | | | 1 | | 1 | 20 | bread/cake products | |
| 011702 | machine repair | | | 3 | | | | 1 | 1 | | | | 2 | 2 | | 1 | 1 | 1 | | 1 | | 2 | 1 | 1 | | 17 | machine repair | |
| 011602 | city gas service | | | 4 | | | | 1 | 1 | 1 | | | | 1 | | 1 | | 1 | | 1 | 1 | | 1 | 2 | 1 | 16 | city gas service | |
| 010801 | non organic or organic chemical products | | | 3 | | | | 2 | 1 | | | | | | | 4 | | 1 | 1 | | | 2 | | | 1 | 15 | non organic or organic chemical products | |
| 030110 | water supply/sewage construction work | | | 1 | | | | | 4 | 1 | 3 | | | 1 | 2 | | | | | | 2 | | 1 | | | 15 | water supply/sewage construction work | |
| 140209 | other restaurants | | | 2 | | | | 1 | 1 | 2 | 2 | | | | 2 | 1 | 1 | | 2 | | | | | 1 | | 15 | other restaurants | |
| 080201 | all kinds of retail | | | 5 | | 2 | | 1 | | 1 | 2 | 1 | | 1 | | 1 | | | | | | | | | | 14 | all kinds of retail | |
| 150103 | other waste disposal service | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 2 | | | 1 | 2 | | | 1 | | | | 14 | other waste disposal service | |
| 140309 | other amusement service | | | 2 | | 1 | | | | | | 1 | | 1 | | | 3 | | | 2 | 1 | | 1 | | | 13 | other amusement service | |
| 011709 | other manufacturing | | | 1 | | 1 | | 1 | | | | 1 | | 2 | | | 1 | 1 | | 2 | | | | | | 11 | other manufacturing | |
| 080202 | auto mobile retail | | | | | 1 | | 1 | 2 | 1 | | | | | | | | | 2 | 1 | | | | | | 11 | auto mobile retail | |
| 150109 | other cleaning and livestock process service | | | | | | | 1 | 1 | | | | | | 1 | 2 | | | 3 | | 1 | | | | | 10 | other cleaning and livestock process service | |

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| 150101 | building maintenance service | | | | | | | 1 | 1 | 1 | | | 2 | | | | | 1 | 1 | | | | 2 | | | 9 | building maintenance service |
| 010803 | pharmaceuticals | | | | 2 | | 2 | | | | | 1 | 2 | | 1 | | | | | | | | | | | 8 | pharmaceuticals |
| 030202 | wooden house construction work | | | | 2 | | 1 | 1 | | | | | 2 | | | | 1 | | 1 | | | | | | | 8 | wooden house construction work |
| 120109 | other education/research service | | | 1 | | 1 | | 1 | | | | | | | | | 4 | | | 1 | | | | | | 8 | other education/research service |
| 130301 | bathroom | | | 1 | | | 1 | | 5 | | | | | | | | | | | | | | 1 | | | 8 | bathroom |
| 011204 | metal plating products | | | | | | | | | 1 | | | 2 | | | 2 | | | | 1 | 1 | | | | | 7 | metal plating products |
| 011002 | casting products | | | | | | 1 | | | | 1 | | | | | 1 | 1 | | 1 | | | | 1 | | | 6 | casting products |
| 011101 | nonferrous metals/rolling products | | | | 1 | | | 1 | | | | | 1 | | | | | | | 1 | 2 | | | | | 6 | nonferrous metals/rolling products |
| 130101 | hospital | | | | 1 | | | 2 | 1 | 1 | | | | | | | | | | | | | 1 | | | 6 | hospital |
| 010899 | other chemical products | | | | | | | | | | | 2 | 1 | | | | 1 | | | 1 | | | | | | 5 | other chemical products |
| 011102 | nonferrous metals casting products | | | | | | | 1 | | | | | | | | 1 | | | 1 | 1 | | | 1 | | | 5 | nonferrous metals casting products |
| 040202 | bus service | | | | | | | 1 | 1 | | 2 | | 1 | | | | | | | | | | | | | 5 | bus service |
| 040302 | specific truck transportation service | | | | | | 1 | | | | | 1 | | 2 | | | | | | | | 1 | | | | 5 | specific truck transportation service |
| 010101 | meat/dairy products | | | 1 | | | | 1 | | | | | 1 | | | | 1 | | | | | | | | | 4 | meat/dairy products |
| 010602 | paper processing products | | | | | | | | | | | | 1 | | | | 1 | | | | | | 1 | 1 | | 4 | paper processing products |
| 010909 | other sand and stone products | | | | | | | | | 1 | | | | | | 3 | | | | | | | | | | 4 | other sand and stone products |
| 011009 | other steel products | | | | | | | | | | | | | | | 1 | 1 | 1 | | | | | 1 | | | 4 | other steel products |
| 011305 | other precision machine products | | | | | 2 | | | | | | | | | | | 1 | | | | 1 | | | | | 4 | other precision machine products |
| 011601 | electric utility service | | | | | | | | 1 | | | | 3 | | | | | | | | | | | | | 4 | electric utility service |
| 011603 | city water service | | | | | | | 1 | 3 | | | | | | | | | | | | | | | | | 4 | city water service |
| 030301 | electricity/telecommunication work | | | | | | | 1 | | | | | | | | | 2 | | | | | | 1 | | | 4 | electricity/telecommunication work |
| 040309 | other land cargo transportation service | | | | | 1 | | | | | | | | 1 | | | | | | | 1 | | 1 | | | 4 | other land cargo transportation service |
| 070201 | fishery | | | | 3 | | 1 | | | | | | | | | | | | | | | | | | | 4 | fishery |
| 140301 | golf course | | | | | | | 1 | | | | | | | 1 | 1 | | | | | | | 1 | | | 4 | golf course |
| 010804 | petroleum/coal products | | | | | | | 1 | 1 | | | | 1 | | | | | | | | | | | | | 3 | petroleum/coal products |
| 010903 | pottery products | | | | | 1 | | | | | 2 | | | | | | | | | | | | | | | 3 | pottery products |
| 011109 | other nonferrous metal products | | | 1 | | | | | | | | | | | | | | | | | | | 1 | | 1 | 3 | other nonferrous metal products |
| 030111 | port/seaside construction work | | | | | | | | | 1 | | 1 | | | | 1 | | | | | | | | | | 3 | port/seaside construction work |
| 040201 | taxi service | | | 2 | | | | | | | | | | | | | 1 | | | | | | | | | 3 | taxi service |
| 080401 | warehousing | | | | | | 1 | 1 | | | | | 1 | | | | | | | | | | | | | 3 | warehousing |
| 090101 | banking/trust business | | | | | | | | | | | | | | 1 | | | | | | | | | 2 | | 3 | banking/trust business |
| 170201 | security service | | | 1 | | | | | | 1 | | | | | | 1 | | | | | | | | | | 3 | security service |
| 010901 | cement products | | | | | | | | | | | | | | | 1 | | | | | | | 1 | | | 2 | cement products |
| 011302 | measuring instruments | | | | | 1 | | | | | | | 1 | | | | | | | | | | | | | 2 | measuring instruments |

