|     |  | 01   | 02                             | 03    | 04  | 05       | 06            | 07                   | 08  | 09   | 10    | 11                                     | 12                                    | 13                | 14        | 15    | 16   | 17                                      | 18                              | 19                                       | 90     | 99             | 00   |
|-----|--|------|--------------------------------|-------|---|----------|---------------|----------------------|-----|--|-------|--|---------------------------------------|-------------------|-----------|-------|------|---|---------------------------------|--|--------|----------------|------|
|     | small causal agents  | from | falling<br>to<br>same<br>level | crash | struck<br>by<br>flying<br>or<br>falling<br>object | collapse | crashed<br>by | caught<br>in/between | cut | injury<br>to the<br>sole<br>of the<br>foot | drown | contact to<br>high/low-<br>temperature | contact<br>to<br>harmful<br>substance | electric<br>shock | explosion | burst | fire | traffic<br>accident<br>(public<br>road) | traffic<br>accident<br>(others) | reaction to<br>motion/improper<br>motion | others | unclassifiable | e to |
|     | engine   |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 121 | power transmission mechanism                                     |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 31  | circular sawing machine  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 132 | band sawing machine  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 133 | wood planer<br>machine   |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 134 | hollow chisel<br>mortiser, wood<br>borer                         |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 135 | chamfering<br>machine, router,<br>woodworking<br>milling machine |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 136 | chain saw  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 139 | other woodworking machines                                       |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 141 | leveling,<br>transporting or<br>loading machine                  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 142 | excavating machine   |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 143 | foundation work machine  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 144 | hardening machine  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 45  | demolition<br>machine  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 146 | vehicle for high lift<br>work                                    |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 149 | other construction machines                                      |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
|     | lathe  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 152 | drill press, milling machine                                     |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 153 | grinding machine,<br>buffing machine                             |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 154 | power press  |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |
| 155 | forging pressure   |      |                                |       |   |          |               |                      |     |  |       |  |                                       |                   |           |       |      |   |                                 |  |        |                | 0    |

## Relation between small causal agents and type of Fatal accidents in code no. 80401 warehousing as small industry in 1999-2020

|     | hammer   |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  |    |
|-----|--|---|---|---|---|---|----------|----|--|--|--|--|---|---|------|--|----|
| 156 | shearing machine                                 |   |   |   |   |   |          |    |  |  |  |  | Ī |   |      |  | 0  |
| 159 | other metal<br>manufacturing<br>machines         |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 161 | centrifugal<br>machine                           |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 162 | mixer, grinder                                   |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 163 | roll machine<br>(except printingroll<br>machine) |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 164 | injection molding machine                        |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 165 | food<br>manufacturing<br>machine                 |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 166 | printing machine                                 |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | industrial robot                                 |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 169 | other general power machines                     |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 171 | felling machine                                  |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | mobile logging<br>machine                        |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | skyline yarding<br>machine                       |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 179 | other mobile<br>silviculture<br>machine          |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 211 | crane  | 1 |   |   |   |   |          | 3  |  |  |  |  |   |   |      |  | 4  |
| 212 | mobile crane                                     |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | derrick crane                                    |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | elevator, lift                                   |   |   |   |   |   |          |    |  |  |  |  |   |   | <br> |  | 0  |
|     | cargo lifting<br>appliance                       |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 216 | gondola  |   |   |   |   |   | <u> </u> |    |  |  |  |  |   |   |      |  | 0  |
| 217 | lumberyard<br>equipment, logging<br>cableway     |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 218 | simple skyline<br>yarding equipment              |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
| 219 | other powered crane                              | 1 |   |   |   |   |          | 1  |  |  |  |  |   |   |      |  | 2  |
| 221 | truck  | 1 |   |   |   |   | 1        |    |  |  |  |  |   | 1 |      |  | 3  |
|     | forklift   | 6 | 2 | 1 | 1 | 2 | 6        | 14 |  |  |  |  |   |   |      |  | 32 |
|     | railway equipment                                |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |
|     | conveyor   |   |   |   |   |   |          | 1  |  |  |  |  |   |   |      |  | 1  |
| 225 | loader   |   |   |   |   |   |          |    |  |  |  |  |   |   |      |  | 0  |

| 226 | straddle carrier                       |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|-----|--|---|--|---|--|---|--|--|--|--|--|---|---|--|--|-------|
| 227 | rough terrain<br>hauler                |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 229 | other powered<br>conveying<br>machines |   |  |   |  | 2 |  |  |  |  |  |   |   |  |  | 2     |
| 231 | cars, bus,<br>motorcycle               |   |  |   |  |   |  |  |  |  |  | - | 1 |  |  | 1     |
|     | railway vehicle                        |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | other vehicles                         |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | boiler                                 |   |  |   |  |   |  |  |  |  |  |   |   |  |  | <br>0 |
| 312 | pressure vessel                        |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 319 | other pressure<br>vessels              |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 321 | chemical facilities                    |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 331 | gas welding<br>equipment               |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 332 | arc welding<br>equipment               |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | other welding<br>equipment             |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 341 | kiln, caldron                          |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 342 | industrial dryer                       |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 349 | other kiln, caldron                    |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 351 | transmission                           |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 352 | electric power<br>facilities           |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 359 | other electrical equipment             |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 361 | human power<br>cranes                  |   |  | 1 |  |   |  |  |  |  |  |   |   |  |  | 1     |
| 362 | human power<br>hauling equipment       |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 363 | human power<br>machine                 |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | hand tool                              |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | ladder                                 | 1 |  |   |  |   |  |  |  |  |  |   |   |  |  | 1     |
|     | slinging tool                          |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 379 | other tools                            |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 391 | other equipments, facilities           |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 411 | scaffolding                            |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
|     | timbering                              |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 413 | stairs, landing stage                  |   |  |   |  |   |  |  |  |  |  |   |   |  |  | 0     |
| 414 | 1 0                                    | 3 |  |   |  |   |  |  |  |  |  |   |   |  |  | 3     |
|     | roof, beam, haze,                      |   |  |   |  |   |  |  |  |  |  |   |   |  |  |       |

|     | crossbeam,<br>principal rafter                  | 1  |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
|-----|---|----|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| 416 | working platform,<br>boot board                 | 2  | 2 |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| 417 | passage   |    | 1 |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| 418 | building,<br>establishment                      | 2  |   |   |   | 1 |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| 419 | other temporary<br>buildings,<br>establishments | 3  |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| 511 | explosive<br>substance                          |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 512 | inflammable<br>substance                        |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 513 | inflammable gas                                 |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 514 | harmful substance                               |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 515 | radiation                                       |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 519 | other hazards,<br>harmful substances            |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 521 | metal material                                  |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 522 | lumber, bamboo                                  |    |   |   | 1 |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| 523 | stone, sand,<br>substance                       |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 529 | other materials                                 |    |   |   |   | 1 |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| 611 | load  | 1  |   |   | 1 | 1 |   | 1  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| 612 | machine/equipment<br>as load                    |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 711 | natural ground,<br>rock                         |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 712 | standing tree                                   |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 713 | water   |    |   |   |   |   |   |    |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 3  |
| 714 | abnormal<br>environment                         |    |   |   |   |   |   |    |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1  |
| 715 | high/cold<br>temperature<br>environment         |    |   |   |   |   |   |    |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1  |
| 719 | other environments                              |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 911 | other causal agent                              |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0  |
| 921 | no causal agent                                 |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   | 6 |   | 6  |
| 999 | unclassifiable                                  |    |   |   |   |   |   |    |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1  |
| 000 | total   | 22 | 5 | 1 | 4 | 5 | 7 | 22 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 6 | 0 | 80 |

Data of 2011 year do not include Industrial accidents caused by Great East Japan Earthquake in 2011.

Data sources: <u>https://anzeninfo.mhlw.go.jp/anzen\_pg/SIB\_FND.aspx</u> (MHLW, Japan)