

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| contact to harmful substance | 3 | 1 | 4 | | 3 | 3 | 2 | 4 | 2 | | | 1 | 1 | 2 | 13 | 1 | | | 1 | | 1 | 1 | 4 | 3 | 50 |
| electric shock | | | 1 | | | | | | | | | | | 2 | | | | | | | | | | | 3 |
| explosion | | 1 | 1 | | | | | 2 | | | | | | 1 | | | 1 | | | | | | | | 6 |
| burst | 1 | 1 | 1 | | | 1 | | | | 1 | 1 | | | | | | 1 | 1 | | | | | | | 8 |
| fire | | | 1 | | | 1 | | 2 | | | | 1 | | | 1 | | 1 | | | | | | 2 | | 9 |
| traffic accident (public road) | 17 | 23 | 30 | 46 | 39 | 29 | 37 | 25 | 55 | 39 | 28 | 42 | 22 | 32 | 35 | 30 | 18 | 26 | 27 | 26 | 27 | 25 | 30 | 30 | 738 |
| traffic accident (others) | 3 | 3 | 2 | 1 | | | 1 | 2 | 3 | 1 | 1 | | 2 | 1 | 2 | 1 | | 1 | | 2 | 2 | 3 | 1 | 1 | 33 |
| reaction to motion/improper motion | 107 | 98 | 119 | 111 | 130 | 130 | 149 | 146 | 170 | 161 | 162 | 147 | 155 | 183 | 195 | 174 | 206 | 229 | 261 | 251 | 329 | 372 | 422 | 410 | 4,817 |
| others | 3 | 3 | 2 | 1 | 2 | 4 | 4 | 3 | 2 | 6 | 5 | 6 | 10 | 6 | 4 | 3 | 5 | 8 | 8 | 8 | 8 | 14 | 73 | 13 | 201 |
| unclassifiable | 1 | 1 | 2 | 2 | | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 4 | 2 | 5 | 1 | 2 | 2 | 1 | 3 | 2 | | 4 | 43 |
| total | 970 | 958 | 1,066 | 992 | 1,060 | 1,057 | 1,139 | 1,184 | 1,154 | 1,206 | 995 | 1,033 | 1,062 | 1,063 | 1,096 | 1,137 | 1,165 | 1,230 | 1,398 | 1,442 | 1,561 | 1,662 | 1,863 | 1,773 | 29,266 |

Causal agents (large) of fatal and non-fatal accidents in land cargo handling service in 1999-2022

| Causal (L) agents | 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 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| machine | 38 | 34 | 28 | 23 | 29 | 36 | 36 | 38 | 33 | 24 | 29 | 25 | 26 | 24 | 22 | 27 | 27 | 20 | 23 | 20 | 27 | 27 | 26 | 24 | 666 |
| crane, conveying machine | 364 | 391 | 427 | 430 | 421 | 430 | 445 | 463 | 443 | 441 | 313 | 365 | 333 | 319 | 364 | 362 | 315 | 356 | 381 | 396 | 392 | 406 | 378 | 425 | 9,360 |
| other equipment | 146 | 141 | 162 | 137 | 165 | 154 | 185 | 204 | 196 | 230 | 201 | 194 | 213 | 230 | 231 | 256 | 259 | 280 | 328 | 343 | 358 | 427 | 491 | 447 | 5,978 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| temporary buildings, establishments | 140 | 136 | 147 | 150 | 160 | 130 | 185 | 171 | 161 | 191 | 170 | 182 | 196 | 193 | 169 | 203 | 234 | 233 | 263 | 292 | 315 | 289 | 343 | 303 | 4,956 |
| substance, material | 86 | 63 | 71 | 56 | 70 | 72 | 50 | 63 | 60 | 55 | 40 | 31 | 37 | 41 | 57 | 44 | 44 | 50 | 59 | 31 | 53 | 35 | 52 | 44 | 1,264 |
| load | 151 | 141 | 169 | 143 | 154 | 167 | 177 | 184 | 187 | 199 | 190 | 171 | 177 | 176 | 180 | 156 | 201 | 189 | 228 | 231 | 255 | 306 | 342 | 319 | 4,793 |
| environment | 5 | 2 | 12 | 12 | 9 | 8 | 4 | 11 | 7 | 15 | 5 | 14 | 19 | 18 | 18 | 25 | 12 | 22 | 24 | 44 | 31 | 34 | 23 | 38 | 412 |
| others | 40 | 50 | 50 | 41 | 52 | 60 | 57 | 50 | 67 | 51 | 47 | 51 | 61 | 62 | 55 | 64 | 73 | 80 | 92 | 85 | 130 | 138 | 208 | 173 | 1,837 |
| total | 970 | 958 | 1,066 | 992 | 1,060 | 1,057 | 1,139 | 1,184 | 1,154 | 1,206 | 995 | 1,033 | 1,062 | 1,063 | 1,096 | 1,137 | 1,165 | 1,230 | 1,398 | 1,442 | 1,561 | 1,662 | 1,863 | 1,773 | 29,266 |

Causal agents (middle) of fatal and non-fatal accidents in land cargo handling service in 1999-2022

| Causal (M) agents | 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 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| engine | | | | | 1 | | | | | | | 2 | | | | 1 | 1 | | | | | | 2 | | 7 |
| power transmission mechanism | 2 | 1 | | | 3 | 1 | 2 | 1 | 2 | | 3 | 4 | 2 | | 1 | | 4 | 1 | 2 | 2 | 2 | 1 | 4 | 4 | 42 |
| woodworking machine | 11 | 14 | 10 | 7 | 3 | 9 | 8 | 11 | 7 | 5 | 7 | 6 | 7 | 10 | 6 | 10 | 7 | 7 | 1 | 4 | 3 | 6 | 2 | 3 | 164 |
| construction machine | 5 | 6 | 4 | 3 | 5 | 3 | 4 | 4 | 3 | 4 | 1 | 2 | 4 | 4 | 2 | | 3 | 2 | 5 | 2 | 1 | 1 | 3 | | 71 |
| metal manufacturing machine | 9 | 3 | 1 | 2 | 2 | 4 | 3 | 5 | 5 | 2 | 2 | 3 | | 2 | 2 | | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 57 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| general machine | 11 | 10 | 13 | 11 | 15 | 19 | 19 | 17 | 16 | 13 | 16 | 8 | 13 | 8 | 11 | 16 | 11 | 9 | 13 | 11 | 19 | 17 | 14 | 15 | 325 |
| mobile silviculture machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| crane | 31 | 30 | 27 | 34 | 20 | 17 | 19 | 16 | 16 | 25 | 16 | 10 | 10 | 19 | 10 | 12 | 15 | 8 | 12 | 9 | 18 | 9 | 18 | 14 | 415 |
| conveying machine | 316 | 340 | 382 | 368 | 379 | 396 | 396 | 426 | 380 | 382 | 258 | 317 | 310 | 280 | 326 | 320 | 285 | 329 | 350 | 354 | 356 | 366 | 333 | 385 | 8,334 |
| vehicle | 17 | 21 | 18 | 28 | 22 | 17 | 30 | 21 | 47 | 34 | 39 | 38 | 13 | 20 | 28 | 30 | 15 | 19 | 19 | 33 | 18 | 31 | 27 | 26 | 611 |
| pressure vessel | 2 | 1 | 4 | | 1 | | | 1 | 1 | | 2 | | | | | 1 | | | | 1 | | | 1 | | 15 |
| chemical facilities | | | | | 1 | | 1 | | | 1 | | | | | | | | | | | | | | | 3 |
| welding equipment | | | 1 | 2 | 1 | | | | | | | | | | | 1 | | | | | | 2 | | | 7 |
| kiln, caldron | | | 1 | | 1 | 1 | | 1 | 1 | | | 1 | | | | | | | 1 | | | | | | 7 |
| electric equipment | | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | | | 2 | | 2 | | 1 | | 2 | | 1 | 1 | 5 | 21 |
| human power machine, tools | 47 | 66 | 67 | 61 | 54 | 68 | 67 | 87 | 80 | 109 | 102 | 95 | 91 | 111 | 101 | 122 | 123 | 121 | 173 | 179 | 164 | 221 | 239 | 249 | 2,797 |
| tools | 81 | 62 | 68 | 61 | 89 | 73 | 93 | 90 | 101 | 98 | 66 | 80 | 104 | 97 | 102 | 116 | 115 | 129 | 125 | 125 | 160 | 157 | 198 | 155 | 2,545 |
| other equipments, facilities | 16 | 11 | 20 | 13 | 18 | 12 | 23 | 24 | 12 | 21 | 30 | 18 | 18 | 20 | 28 | 14 | 21 | 29 | 29 | 36 | 32 | 48 | 52 | 38 | 583 |
| temporary buildings, establishments | 140 | 136 | 147 | 150 | 160 | 130 | 185 | 171 | 161 | 191 | 170 | 182 | 196 | 193 | 169 | 203 | 234 | 233 | 263 | 292 | 315 | 289 | 343 | 303 | 4,956 |
| hazards, harmful substances | 4 | | 3 | | 5 | 3 | 2 | 3 | 2 | 2 | | | 1 | 2 | 14 | 4 | 2 | 1 | 1 | 2 | 2 | 2 | 6 | 2 | 63 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|-----|--|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| boot board | | | 32 | | 30 | | 19 | 31 | 17 | 33 | 26 | 27 | 38 | 31 | 17 | 43 | 35 | 37 | 44 | 34 | 45 | 36 | 51 | 58 | 684 |
| passage | | | 39 | | 48 | | 70 | 46 | 50 | 59 | 64 | 76 | 77 | 69 | 79 | 80 | 81 | 102 | 121 | 149 | 143 | 135 | 149 | 113 | 1,750 |
| building, establishment | | | 22 | | 24 | | 32 | 27 | 33 | 28 | 26 | 23 | 25 | 30 | 27 | 21 | 39 | 24 | 33 | 37 | 31 | 26 | 32 | 32 | 572 |
| other temporary buildings, establishments | | | 25 | | 20 | | 28 | 24 | 21 | 23 | 15 | 21 | 16 | 20 | 17 | 17 | 24 | 18 | 23 | 19 | 35 | 37 | 29 | 31 | 463 |
| explosive substance | | | | | | | | 1 | | | | | | | | | | | | 1 | | | | | 2 |
| inflammable substance | | | 1 | | 1 | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | | 6 |
| inflammable gas | | | | | 1 | | 1 | | | | | | | | | | | | | | | | 1 | 1 | 4 |
| harmful substance | | | 1 | | 3 | | | 2 | 2 | 1 | | | | | 12 | | | | 1 | | 1 | 1 | | 1 | 25 |
| radiation | | | | | | | | | | | | | | | | | | | | | | | | | |
| other hazards, harmful substances | | | 1 | | | | 1 | | | 1 | | | 1 | 2 | 1 | 3 | 1 | | | 1 | 1 | 1 | 5 | | 19 |
| metal material | | | 44 | | 33 | | 24 | 35 | 34 | 32 | 18 | 20 | 20 | 17 | 18 | 19 | 20 | 25 | 24 | 19 | 26 | 15 | 21 | 26 | 490 |
| lumber, bamboo | | | 14 | | 20 | | 15 | 15 | 14 | 13 | 10 | 7 | 7 | 12 | 12 | 7 | 7 | 9 | 19 | 7 | 9 | 8 | 9 | 7 | 221 |
| stone, sand, substance | | | | | 3 | | 2 | | 1 | 2 | | | 1 | | 1 | 2 | | | | 2 | 2 | | | | 16 |
| other materials | | | 10 | | 9 | | 7 | 10 | 9 | 6 | 12 | 4 | 8 | 10 | 12 | 12 | 15 | 15 | 15 | 1 | 14 | 10 | 16 | 9 | 204 |
| load | | | 167 | | 147 | | 168 | 175 | 177 | 189 | 185 | 164 | 172 | 166 | 173 | 149 | 194 | 186 | 222 | 226 | 249 | 301 | 339 | 308 | 4,057 |
| machine/equipment as load | | | 2 | | 7 | | 9 | 9 | 10 | 10 | 5 | 7 | 5 | 10 | 7 | 7 | 7 | 3 | 6 | 5 | 6 | 5 | 3 | 11 | 134 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| natural ground, rock | | | | | 2 | | 1 | 1 | 1 | 1 | | | 2 | | | 1 | | 1 | 1 | 1 | 1 | 2 | | 1 | 16 |
| standing tree | | | | | | | | | | | 1 | | | | | 1 | | | | 1 | 1 | 1 | 1 | | 6 |
| water | | | | | 1 | | | | | | | | 4 | 1 | 1 | | | | 1 | 2 | | 2 | | | 12 |
| abnormal environment | | | 1 | | | | | | 1 | | 1 | 1 | 2 | | | | | | 1 | | | | | | 7 |
| high/cold temperature environment | | | 2 | | 3 | | | 4 | 3 | 7 | 1 | 6 | 3 | 8 | 9 | 11 | 5 | 18 | 14 | 20 | 21 | 21 | 11 | 19 | 186 |
| other environments | | | 9 | | 3 | | 3 | 6 | 2 | 7 | 3 | 7 | 9 | 7 | 8 | 12 | 7 | 3 | 8 | 19 | 8 | 8 | 11 | 18 | 158 |
| other causal agent | | | 17 | | 4 | | 9 | 4 | 11 | 9 | 5 | 7 | 14 | 10 | 11 | 7 | 14 | 12 | 16 | 5 | 17 | 19 | 79 | 28 | 298 |
| no causal agent | | | 31 | | 47 | | 48 | 44 | 55 | 41 | 39 | 43 | 45 | 48 | 41 | 53 | 57 | 66 | 73 | 79 | 107 | 116 | 127 | 144 | 1,304 |
| unclassifiable | | | 2 | | 1 | | | 2 | 1 | 1 | 3 | 1 | 2 | 4 | 3 | 4 | 2 | 2 | 3 | 1 | 6 | 3 | 2 | 1 | 44 |
| total | 970 | 958 | 1,066 | 992 | 1,060 | 1,057 | 1,139 | 1,184 | 1,154 | 1,206 | 995 | 1,033 | 1,062 | 1,063 | 1,096 | 1,137 | 1,165 | 1,230 | 1,398 | 1,442 | 1,561 | 1,662 | 1,863 | 1,773 | 29,266 |

Workers age of fatal and non-fatal accidents in land cargo handling service in 1999-2022

| Age | 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 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 19 years old or less | 25 | 26 | 27 | 18 | 24 | 28 | 28 | 19 | 27 | 21 | 12 | 16 | 21 | 19 | 23 | 19 | 21 | 28 | 25 | 20 | 31 | 31 | 33 | 32 | 574 |
| 20-29 | 233 | 230 | 235 | 205 | 250 | 213 | 233 | 202 | 190 | 221 | 165 | 147 | 151 | 138 | 128 | 139 | 150 | 156 | 188 | 187 | 187 | 212 | 258 | 242 | 4,660 |
| 30-39 | 212 | 222 | 253 | 252 | 268 | 270 | 312 | 329 | 316 | 294 | 245 | 236 | 246 | 240 | 244 | 241 | 222 | 211 | 247 | 233 | 259 | 219 | 275 | 266 | 6,112 |
| 40-49 | 176 | 188 | 194 | 194 | 192 | 203 | 217 | 228 | 265 | 289 | 232 | 263 | 283 | 306 | 321 | 346 | 341 | 357 | 399 | 386 | 410 | 435 | 483 | 388 | 7,096 |
| 50-59 | 253 | 220 | 269 | 249 | 264 | 243 | 248 | 318 | 259 | 260 | 216 | 244 | 212 | 227 | 253 | 234 | 276 | 296 | 347 | 406 | 419 | 503 | 527 | 515 | 7,258 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| May | 79 | 65 | 100 | 88 | 80 | 85 | 83 | 101 | 106 | 110 | 84 | 83 | 79 | 92 | 88 | 103 | 102 | 76 | 120 | 104 | 113 | 139 | 154 | 138 | 2,372 |
| June | 66 | 76 | 86 | 66 | 96 | 110 | 111 | 84 | 88 | 111 | 87 | 75 | 100 | 99 | 83 | 89 | 122 | 103 | 114 | 108 | 133 | 158 | 157 | 147 | 2,469 |
| July | 96 | 83 | 100 | 100 | 81 | 95 | 108 | 89 | 89 | 106 | 94 | 82 | 89 | 94 | 103 | 106 | 103 | 112 | 107 | 147 | 170 | 147 | 176 | 170 | 2,647 |
| August | 82 | 82 | 81 | 71 | 94 | 63 | 107 | 111 | 99 | 83 | 71 | 98 | 84 | 100 | 99 | 83 | 106 | 111 | 122 | 112 | 134 | 142 | 176 | 151 | 2,462 |
| September | 76 | 87 | 81 | 87 | 101 | 85 | 100 | 104 | 101 | 75 | 73 | 78 | 91 | 76 | 114 | 109 | 99 | 102 | 144 | 154 | 135 | 145 | 187 | 149 | 2,553 |
| October | 80 | 85 | 99 | 80 | 89 | 95 | 110 | 106 | 92 | 110 | 88 | 78 | 89 | 89 | 82 | 91 | 99 | 109 | 138 | 133 | 145 | 138 | 129 | 149 | 2,503 |
| November | 86 | 83 | 77 | 91 | 92 | 84 | 102 | 112 | 85 | 81 | 64 | 95 | 96 | 93 | 85 | 86 | 80 | 101 | 98 | 121 | 121 | 139 | 145 | 132 | 2,349 |
| December | 92 | 106 | 69 | 76 | 91 | 74 | 89 | 106 | 100 | 76 | 100 | 77 | 85 | 85 | 85 | 105 | 84 | 99 | 120 | 128 | 153 | 143 | 141 | 151 | 2,435 |
| total | 970 | 958 | 1,066 | 992 | 1,060 | 1,057 | 1,139 | 1,184 | 1,154 | 1,206 | 995 | 1,033 | 1,062 | 1,063 | 1,096 | 1,137 | 1,165 | 1,230 | 1,398 | 1,442 | 1,561 | 1,662 | 1,863 | 1,773 | 29,266 |

Prefecture of fatal and non-fatal accidents in land cargo handling service in 1999-2022

| Prefecture | 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 | |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|----|
| Hokkaido | 45 | 49 | 37 | | 31 | | 45 | 57 | 40 | 69 | 38 | 39 | 60 | 47 | 44 | 36 | 43 | 46 | 59 | 44 | 46 | 54 | 61 | 51 | 1,041 | |
| Aomori | 4 | 5 | 3 | | 3 | | 3 | 4 | 7 | 2 | 3 | 10 | 1 | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | 2 | 56 | |
| Iwate | 2 | 1 | 2 | | 1 | | 2 | 1 | | | | 1 | 4 | | 1 | 1 | 1 | 1 | 4 | 1 | 1 | | 2 | 3 | 29 | |
| Miyagi | 4 | 4 | 11 | | 22 | | 12 | 14 | 5 | 19 | 18 | 17 | 14 | 12 | 6 | 12 | 14 | 13 | 11 | 18 | 11 | 12 | 42 | 16 | 307 | |
| Akita | 1 | 1 | 1 | | 1 | | 3 | | | | | 1 | | | 2 | | | | | | | | | 1 | 11 | |
| Yamagata | | 1 | 3 | | 2 | | 1 | | 2 | 3 | | | | 3 | 2 | 1 | | | | | | | 1 | 4 | 1 | 24 |
| Fukushima | 15 | 6 | 11 | | 11 | | 9 | 9 | 8 | 10 | 2 | 3 | 8 | 12 | 14 | 11 | 14 | 8 | 8 | 11 | 12 | 7 | 7 | 12 | 208 | |
| Ibaraki | 23 | 16 | 19 | | 23 | | 34 | 30 | 31 | 29 | 29 | 27 | 31 | 28 | 30 | 35 | 23 | 21 | 31 | 32 | 42 | 42 | 48 | 45 | 669 | |
| Tochigi | 3 | 9 | 8 | | 22 | | 10 | 14 | 12 | 18 | 33 | 49 | 19 | 19 | 11 | 12 | 18 | 14 | 18 | 18 | 19 | 21 | 28 | 26 | 401 | |
| Gunma | 15 | 14 | 8 | | 25 | | 14 | 21 | 12 | 11 | 5 | 11 | 12 | 15 | 21 | 14 | 19 | 27 | 23 | 15 | 17 | 17 | 24 | 18 | 358 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|--|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Saitama | 56 | 76 | 76 | | 95 | | 120 | 155 | 145 | 126 | 112 | 120 | 139 | 114 | 120 | 135 | 121 | 116 | 136 | 121 | 169 | 199 | 167 | 190 | 2,808 |
| Chiba | 103 | 71 | 93 | | 73 | | 99 | 122 | 140 | 110 | 101 | 111 | 110 | 121 | 144 | 145 | 138 | 168 | 196 | 190 | 192 | 198 | 220 | 239 | 3,084 |
| Tokyo | 103 | 95 | 122 | | 88 | | 99 | 83 | 83 | 101 | 95 | 78 | 77 | 88 | 104 | 87 | 80 | 94 | 127 | 125 | 133 | 126 | 131 | 131 | 2,250 |
| Kanagawa | 91 | 98 | 85 | | 106 | | 122 | 105 | 101 | 128 | 112 | 113 | 122 | 138 | 134 | 113 | 167 | 165 | 196 | 198 | 232 | 262 | 340 | 284 | 3,412 |
| Niigata | 2 | 4 | 4 | | 3 | | 3 | 2 | 5 | 5 | 2 | 1 | 2 | | 4 | 5 | 5 | 7 | 1 | 7 | 2 | 5 | 2 | 4 | 75 |
| Toyama | 3 | 3 | 3 | | 7 | | 2 | 4 | 7 | 1 | 2 | 7 | 2 | 6 | 2 | 4 | 3 | | 3 | 2 | 5 | 3 | 2 | 10 | 81 |
| Ishikawa | 2 | 3 | 2 | | 4 | | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 4 | 1 | | 5 | 4 | 7 | 9 | 4 | 7 | 4 | 4 | 71 |
| Fukui | 3 | | 4 | | | | 2 | 1 | 2 | 3 | | 1 | 2 | 4 | 2 | 3 | 3 | 1 | 1 | | 2 | 1 | 4 | | 39 |
| Yamanashi | 1 | | | | 3 | | 2 | | 3 | 3 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 25 |
| Nagano | 2 | 5 | 6 | | 4 | | 1 | 3 | 6 | 3 | 6 | 3 | 2 | | 1 | 1 | 5 | 4 | 5 | 3 | 5 | 2 | 4 | 3 | 74 |
| Gifu | 6 | 10 | 12 | | 11 | | 9 | 19 | 20 | 22 | 11 | 12 | 9 | 6 | 6 | 14 | 11 | 9 | 11 | 19 | 13 | 7 | 16 | 13 | 266 |
| Shizuoka | 15 | 16 | 32 | | 23 | | 24 | 16 | 25 | 31 | 8 | 8 | 21 | 19 | 12 | 27 | 25 | 23 | 25 | 36 | 36 | 38 | 20 | 31 | 511 |
| Aichi | 70 | 86 | 82 | | 85 | | 100 | 93 | 101 | 113 | 75 | 87 | 106 | 123 | 95 | 112 | 114 | 93 | 117 | 132 | 149 | 144 | 119 | 129 | 2,325 |
| Mie | 14 | 20 | 19 | | 25 | | 18 | 15 | 32 | 23 | 14 | 24 | 22 | 13 | 11 | 24 | 25 | 22 | 10 | 20 | 20 | 24 | 28 | 24 | 447 |
| Shiga | 3 | 8 | 4 | | 6 | | 6 | 5 | 9 | 6 | 2 | 4 | 8 | 5 | 9 | 3 | 1 | 8 | 4 | 9 | 6 | 2 | 10 | 10 | 128 |
| Kyoto | 9 | 3 | 11 | | 14 | | 17 | 15 | 20 | 12 | 6 | 9 | 12 | 10 | 7 | 16 | 12 | 8 | 7 | 12 | 10 | 14 | 42 | 41 | 307 |
| Osaka | 143 | 134 | 158 | | 137 | | 165 | 151 | 126 | 138 | 119 | 118 | 110 | 117 | 101 | 110 | 129 | 136 | 161 | 174 | 165 | 186 | 162 | 153 | 3,093 |
| Hyogo | 73 | 63 | 80 | | 55 | | 59 | 53 | 43 | 49 | 44 | 41 | 29 | 30 | 60 | 41 | 36 | 53 | 64 | 59 | 52 | 62 | 85 | 75 | 1,206 |
| Nara | 5 | 4 | 2 | | 1 | | 4 | 2 | | 4 | 6 | 3 | 1 | 1 | 1 | 4 | 1 | 3 | 1 | 9 | 1 | 2 | 3 | 4 | 62 |
| Wakayama | 1 | 2 | 3 | | | | 1 | | 2 | 1 | | 1 | 4 | 2 | 2 | 2 | 3 | 5 | 5 | 5 | 6 | 5 | 4 | 4 | 58 |
| Tottori | 2 | | | | 2 | | | | 3 | | | 1 | 3 | | | 2 | 1 | 1 | | 1 | 2 | | 1 | | 19 |
| Shimane | | | | | | | | 1 | | 1 | 1 | | 1 | 2 | | | | | | | | 1 | | | 7 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Okayama | 15 | 13 | 10 | | 19 | | 11 | 17 | 25 | 12 | 17 | 14 | 8 | 6 | 12 | 6 | 10 | 16 | 13 | 14 | 14 | 18 | 16 | 13 | 299 |
| Hiroshima | 19 | 9 | 13 | | 21 | | 15 | 21 | 15 | 11 | 23 | 15 | 15 | 16 | 22 | 25 | 16 | 21 | 19 | 24 | 25 | 23 | 25 | 25 | 418 |
| Yamaguchi | 13 | 7 | 9 | | 7 | | 14 | 13 | 3 | 4 | 3 | 9 | 8 | 15 | 6 | 9 | 3 | 12 | 5 | 6 | 4 | 7 | 4 | 3 | 164 |
| Tokushima | 8 | | 4 | | 8 | | | 3 | 2 | 3 | 3 | 1 | | 1 | 3 | 2 | | | 1 | | | 1 | 3 | 2 | 45 |
| Kagawa | 12 | 9 | 5 | | 4 | | 2 | 10 | 5 | 6 | 7 | 5 | 11 | 5 | 5 | 9 | 6 | 8 | 13 | 7 | 13 | 8 | 6 | 7 | 163 |
| Ehime | 7 | 6 | 9 | | 6 | | 11 | 6 | 8 | 3 | 4 | 4 | 6 | 3 | 7 | 6 | 5 | 7 | 4 | 5 | 8 | 7 | 8 | 8 | 138 |
| Kochi | 10 | 8 | 17 | | 8 | | 2 | 4 | 2 | 1 | | 2 | 1 | | 3 | 1 | | 4 | 3 | | 2 | 1 | 3 | | 72 |
| Fukuoka | 29 | 52 | 61 | | 51 | | 58 | 57 | 62 | 53 | 47 | 47 | 45 | 51 | 59 | 64 | 61 | 55 | 60 | 70 | 98 | 105 | 129 | 123 | 1,437 |
| Saga | 10 | 17 | 9 | | 9 | | 7 | 23 | 19 | 27 | 18 | 9 | 11 | 9 | 12 | 19 | 19 | 24 | 19 | 17 | 19 | 27 | 61 | 21 | 406 |
| Nagasaki | 4 | 10 | 5 | | 4 | | 7 | 4 | 1 | 7 | 3 | 1 | 4 | 5 | 4 | 6 | 7 | 4 | | 3 | 1 | 2 | 4 | 9 | 95 |
| Kumamoto | 4 | 7 | 9 | | 5 | | 6 | 7 | 3 | 6 | 4 | 6 | 9 | 2 | 6 | 4 | 5 | 3 | 3 | 5 | 6 | 3 | 4 | 2 | 109 |
| Oita | 4 | 3 | 4 | | 2 | | 4 | 2 | 3 | 3 | 2 | 3 | | | 1 | 1 | 1 | 1 | 3 | 1 | | 1 | 2 | 2 | 43 |
| Miyazaki | 7 | 4 | 3 | | 19 | | 6 | 11 | 8 | 16 | 6 | 5 | 3 | 4 | 4 | 5 | 3 | 6 | 6 | 5 | 4 | 8 | 8 | 13 | 154 |
| Kagoshima | 4 | 6 | 5 | | 10 | | 5 | 7 | 2 | 6 | 11 | 6 | 6 | 3 | 1 | 4 | 8 | 10 | 10 | 8 | 8 | 4 | 3 | 11 | 138 |
| Okinawa | 5 | | 2 | | 4 | | 4 | 3 | 4 | 4 | 2 | 5 | 2 | 4 | 2 | 4 | 2 | 6 | 6 | 5 | 4 | 4 | 5 | 7 | 84 |
| total | 970 | 958 | 1,066 | 992 | 1,060 | 1,057 | 1,139 | 1,184 | 1,154 | 1,206 | 995 | 1,033 | 1,062 | 1,063 | 1,096 | 1,137 | 1,165 | 1,230 | 1,398 | 1,442 | 1,561 | 1,662 | 1,863 | 1,773 | 29,266 |

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more.

Data of 2022 year do not include Covid-19 cases. Data of 2020 & 2021 year include Covid-19 cases. Fatal and non-fatal data are same situation.

Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

Data sources: <https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html> (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2022e_industry.html

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|----|---|---|----|---|----|---|----|----|---|---|---|----|---|---|---|---|---|---|---|---|---|---|----|-----|
| burst | | | | | | | | | | | | | | | | | | | | | | | | | |
| fire | | | | | | | | 2 | | | | | | | | | | | | 2 | | | | | 4 |
| traffic accident (public road) | 1 | 2 | 2 | 3 | | 1 | 1 | 2 | 3 | 1 | 1 | | | | | 1 | | | | | 4 | | | 22 | |
| traffic accident (others) | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| reaction to motion/improper motion | | | | | | | | | | | | | | | | | | | | | | | | | |
| others | | | | | | | | | | | | 2 | | | | 1 | 1 | 1 | 1 | 1 | | | | 7 | |
| unclassifiable | | | | | | | | | | | | | | | | | | | | | | | | | |
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |

Causal agents (large) of fatal accidents in land cargo handling service in 1999-2022

| Causal (L) agents | 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 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| machine | 1 | 1 | | | 1 | | | 2 | | | | 1 | | 1 | | | | 1 | 1 | | | | | | 9 |
| crane, conveying machine | 7 | 4 | 5 | 7 | 5 | 5 | 5 | 6 | 6 | 2 | 2 | 6 | 4 | 2 | | 3 | 3 | 3 | 4 | 2 | 2 | 9 | 3 | 5 | 100 |
| other equipment | | 1 | 1 | 1 | | | | 1 | 1 | | | | | 1 | | | 1 | | 1 | | 2 | | | | 10 |
| temporary buildings, establishments | | 3 | | | | | 1 | 1 | 1 | 2 | 1 | | 2 | | 1 | | | | | | 1 | | | | 13 |
| substance, material | 1 | | 1 | | | 2 | | | | | | | | | | | | | | | | | | | 4 |
| load | 2 | | 1 | 1 | | 2 | 1 | 1 | 1 | 2 | 2 | 1 | | | | | 2 | 1 | | 1 | 1 | | | 1 | 20 |
| environment | | | | 1 | | | | | 1 | | | 1 | 4 | | | 1 | | | | 2 | | | | | 10 |
| others | | | | | | 1 | | | | | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | 8 |
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|----|----|
| injection molding machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| food manufacturing machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| printing machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| industrial robot | | | | | | | | | | | | | | | | | | | | | | | | | |
| other general power machines | | | | | | | | | | | 1 | | | | | | 1 | 1 | | | | | 3 | | |
| felling machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| mobile logging machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| skyline yarding machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| other mobile silviculture machine | | | | | | | | | | | | | | | | | | | | | | | | | |
| crane | | | | 1 | | | | | | | | | | | | | 1 | | | 1 | 1 | | | 4 | |
| mobile crane | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| derrick crane | | | | | | | | | | | | | | | | | | | | | | | | | |
| elevator, lift | | | | | | | | 1 | | | | | | | | | | | | | | | | 1 | |
| cargo lifting appliance | | | | | | | | | | | | | | | | | | | | | | | | | |
| gondola | | | | | | | | | | | | | | | | | | | | | | | | | |
| lumberyard equipment, logging cableway | | | | | | | | | | | | | | | | | | | | | | | | | |
| simple skyline yarding equipment | | | | | | | | | | | | | | | | | | | | | | | | | |
| other powered crane | | | | | | | | | | | | | | | | | | | | | | | | | |
| truck | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | | | 2 | | | | | 3 | 1 | 28 | |
| forklift | 2 | 2 | 3 | 4 | 1 | 3 | 3 | 3 | 3 | | | 5 | 3 | 1 | | 1 | | 2 | 3 | 2 | 1 | 3 | 2 | 4 | 51 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|----|---|---|----|---|----|---|----|----|---|---|---|----|---|---|---|---|---|---|---|---|---|---|----|-----|
| inflammable gas | | | | | | | | | | | | | | | | | | | | | | | | | |
| harmful substance | | | | | | | | | | | | | | | | | | | | | | | | | |
| radiation | | | | | | | | | | | | | | | | | | | | | | | | | |
| other hazards, harmful substances | | | | | | | | | | | | | | | | | | | | | | | | | |
| metal material | | | | | | 2 | | | | | | | | | | | | | | | | | | 2 | |
| lumber, bamboo | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 | |
| stone, sand, substance | | | | | | | | | | | | | | | | | | | | | | | | | |
| other materials | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| load | 2 | | 1 | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 1 | | | | | 2 | 1 | | 1 | 1 | | 1 | 19 | |
| machine/equipment as load | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 | |
| natural ground, rock | | | | | | | | | | | | | | | | | | | | | | | | | |
| standing tree | | | | | | | | | | | | | | | | | | | | | | | | | |
| water | | | | 1 | | | | | | | | | 4 | | | | | | | | | | | 5 | |
| abnormal environment | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 | |
| high/cold temperature environment | | | | | | | | | 1 | | | | | | | 1 | | | | 2 | | | | 4 | |
| other environments | | | | | | | | | | | | | | | | | | | | | | | | | |
| other causal agent | | | | | | | | | | | | | | | | | | | | | | | | | |
| no causal agent | | | | | | | | | | | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | 7 | |
| unclassifiable | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 | |
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |

Workers age of fatal accidents in land cargo handling service in 1999-2022

| Age | 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 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 19 years old or less | | | | | | | 1 | 1 | 1 | | | | | | | 1 | | | | | 1 | | | | 5 |
| 20-29 | 3 | 1 | | 1 | | | | | 1 | 2 | | 1 | | | | 2 | 1 | 1 | | 1 | | 2 | | | 16 |
| 30-39 | 1 | 4 | 4 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 4 | 2 | | | 1 | 1 | 2 | | 1 | | | | 34 |
| 40-49 | 2 | | 3 | 2 | 1 | 1 | 1 | 2 | 4 | | 3 | | 5 | | | 2 | | 2 | 2 | | 2 | | | 1 | 33 |
| 50-59 | 4 | 4 | 1 | 4 | 4 | 3 | 2 | 5 | | 2 | | 2 | 1 | 2 | 1 | | 2 | 1 | 3 | 2 | 3 | 4 | 2 | 1 | 53 |
| 60 years old or more | 1 | | | 1 | | 4 | 2 | 1 | 2 | 1 | 2 | 4 | 1 | | | 1 | 2 | 1 | | 3 | | 2 | 1 | 4 | 33 |
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |

Workers' number of workplace of fatal accidents in land cargo handling service in 1999-2022

| Workers scale | 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 |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 9 workers or less | 3 | 1 | 2 | | 1 | 5 | 1 | 5 | | 1 | 2 | 3 | 2 | | | 2 | 2 | 1 | 1 | 1 | 3 | 1 | | 1 | 38 |
| 10-29 | 2 | 5 | 1 | 5 | 4 | 2 | 2 | 4 | 4 | 3 | | 3 | 4 | | 1 | 1 | 1 | 3 | 2 | 1 | | 2 | | 1 | 51 |
| 30-49 | 2 | 1 | 2 | | 1 | 2 | 2 | | 1 | 2 | 2 | 2 | 3 | 1 | | | 2 | | 1 | 2 | | 4 | 1 | 3 | 34 |
| 50-99 | 2 | 1 | 2 | 2 | | 1 | 1 | 2 | 4 | | | | 1 | | | 1 | | | 1 | 1 | | 1 | 1 | | 21 |
| 100-299 | 1 | 1 | 1 | 2 | | | | | 1 | | 2 | 1 | | 2 | | | 1 | 2 | | 1 | 1 | 1 | 1 | 1 | 19 |
| 300 workers or more | 1 | | | 1 | | | 1 | | | | | | 1 | 1 | | 1 | 1 | | 2 | | 2 | | | | 11 |
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|----|---|---|----|---|----|---|----|----|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|-----|
| total | 11 | 9 | 8 | 10 | 6 | 10 | 7 | 11 | 10 | 6 | 6 | 9 | 11 | 4 | 1 | 5 | 7 | 6 | 7 | 6 | 6 | 9 | 3 | 6 | 174 |
|-------|----|---|---|----|---|----|---|----|----|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|-----|

Data sources: <https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html> (MHLW, Japan)

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