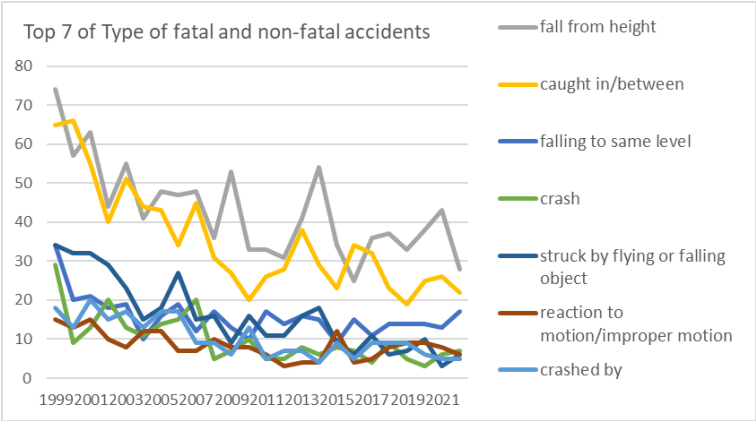
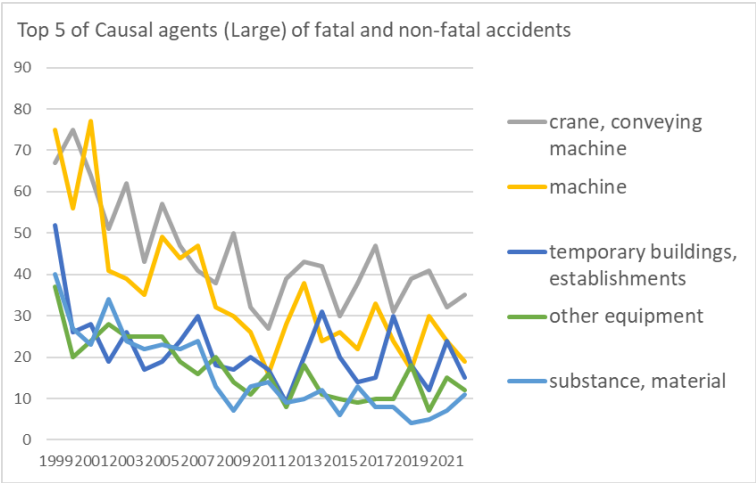


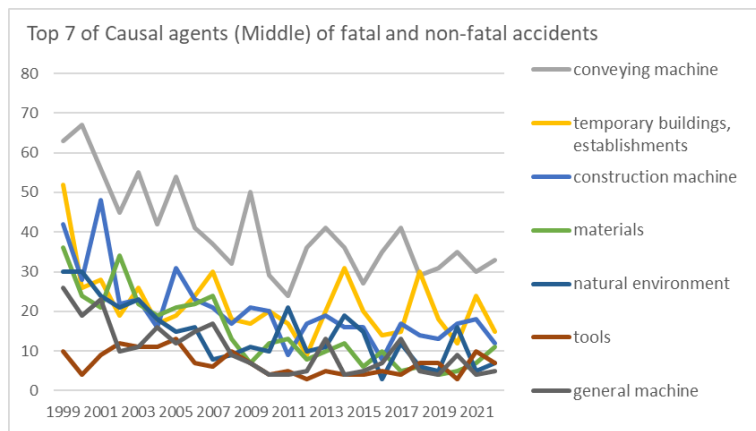
Transition of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



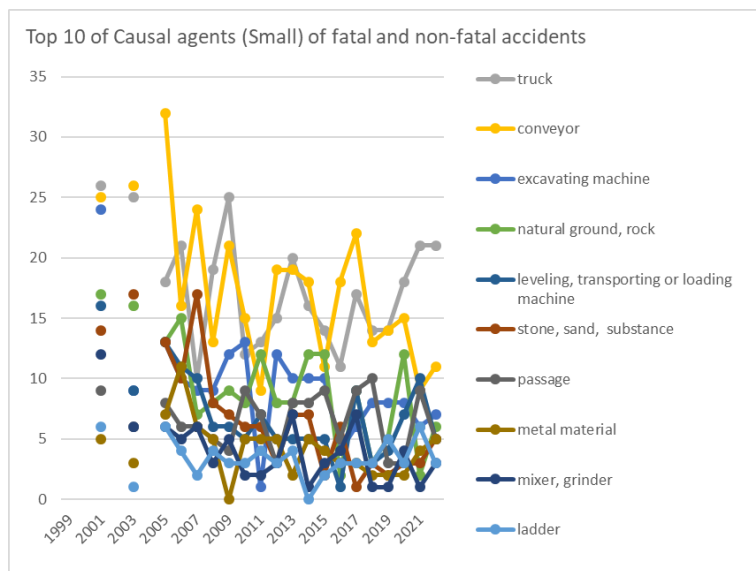
Transition of Top 7 of Type of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



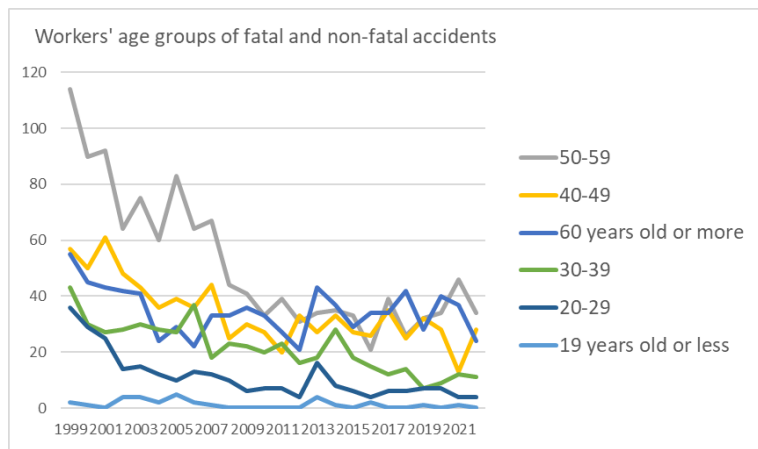
Transition of Top 5 of Causal agents (Large) of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



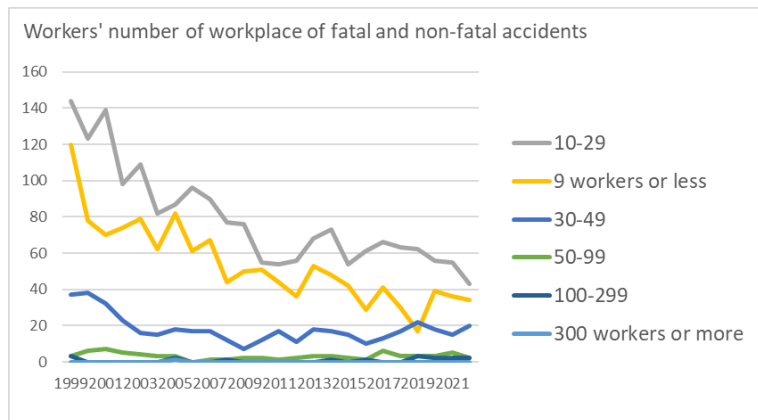
Transition of Top 7 of Causal agents (Middle) of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



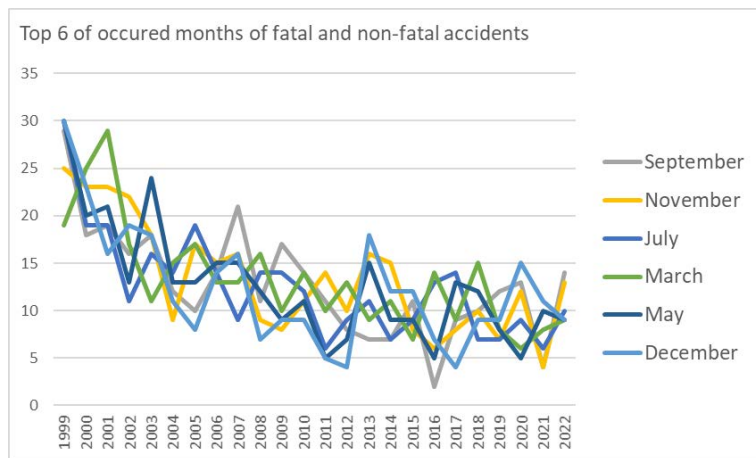
Transition of Top 10 of Causal agents (Small) of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



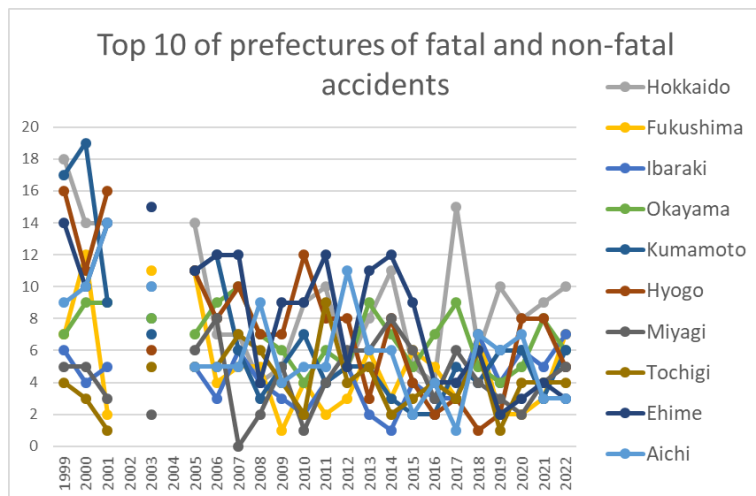
Transition of workers' age groups of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



Transition of workers' number of workplace of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



Transition of Top 6 of occurred months of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)



Transition of Top 10 of prefectures of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)

Transition of Type of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)

Type of accidents	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	Type of accidents
fall from height	74	57	63	44	55	41	48	47	48	36	53	33	33	31	41	54	34	25	36	37	33	38	43	28	1,032	fall from height
caught in/between	65	66	55	40	51	44	43	34	45	31	27	20	26	28	38	29	23	34	32	23	19	25	26	22	846	caught in/between

falling to same level	34	20	21	18	19	10	16	19	12	17	13	10	17	14	16	15	9	15	11	14	14	14	13	17	378	falling to same level
crash	29	9	13	20	13	11	14	15	20	5	7	10	5	5	8	6	8	7	4	9	5	3	6	7	239	crash
struck by flying or falling object	34	32	32	29	23	15	18	27	15	16	9	16	11	11	16	18	9	6	11	6	7	10	3	6	380	struck by flying or falling object
reaction to motion/improper motion	15	13	15	10	8	12	12	7	7	10	8	8	6	3	4	4	12	4	5	8	9	9	8	6	203	reaction to motion/improper motion
crashed by	18	13	20	15	17	13	17	17	9	9	6	13	5	7	7	4	9	5	9	9	9	6	5	5	247	crashed by
collapse	11	15	9	11	11	7	12	4	9	4	3	4	4	4	2	5	3	1	6		3	4	1	3	136	collapse
cut	6	5	7	8	1	2	3	1	4	4	4	1	1	1	2	2	2	2	4	2	3	2	1	2	70	cut
traffic accident (public road)	5	4	6		1		1	2	1	2	2		2		3	2	1		3		1	1	2	2	41	traffic accident (public road)
others	1	2		1	1	1	1		2	1	2	2	2		1		2		1				1	1	22	others
contact to harmful substance			1		1							1							1	1		1		1	7	contact to harmful substance
fire		1					1									1	1							1	5	fire
contact to high/low-temperature	12	5		1	4	4	6		1		1	1	2		2			3	1	1	3	4	2		53	contact to high/low-temperature
burst		2		1	2										1							1	2		9	burst
traffic accident (others)			1	2		1		1				1		1	1	1									9	traffic accident (others)
injury to the sole of	1		1		1				1							1			1	1	1				8	injury to the sole

the foot																										of the foot
explosion	2		2										1						1	2					8	explosion
electric shock		1	2			1	1		1																6	electric shock
drown													1												1	drown
unclassifiable																										unclassifiable
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

Transition of Causal agents (Large) of fatal and non-fatal accidents in 020201 quarrying in Japan (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	Causal (L) agents
crane, conveying machine	67	75	64	51	62	43	57	47	41	38	50	32	27	39	43	42	30	38	47	31	39	41	32	35	1,071	crane, conveying machine
machine	75	56	77	41	39	35	49	44	47	32	30	26	16	28	38	24	26	22	33	24	17	30	24	19	852	machine
temporary buildings, establishments	52	26	28	19	26	17	19	24	30	18	17	20	17	9	20	31	20	14	15	30	18	12	24	15	521	temporary buildings, establishments
other equipment	37	20	24	28	25	25	25	19	16	20	14	11	16	8	18	11	10	9	10	10	18	7	15	12	408	other equipment
substance, material	40	27	23	34	24	22	23	22	24	13	7	13	14	9	10	12	6	13	8	8	4	5	7	11	379	substance, material
environment	30	30	24	21	23	18	15	16	8	9	11	10	21	10	11	19	15	3	12	6	5	16	5	7	345	environment
others	5	7	5	6	6	1	4	2	6	3	4	4	3	2	1	2	6	3	1	3	4	4	3	1	86	others
load	1	4	3		3	1	1		3	2	2	4	2		1	1				1	2	3	3	1	38	load
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

Transition of Causal agents (Middle) of fatal and non-fatal accidents in 020201 quarrying in Japan (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	Causal (M) agents
conveying machine	63	67	56	45	55	42	54	41	37	32	50	29	24	36	41	36	27	35	41	29	31	35	30	33	969	conveying machine
temporary buildings, establishments	52	26	28	19	26	17	19	24	30	18	17	20	17	9	20	31	20	14	15	30	18	12	24	15	521	temporary buildings, establishments
construction machine	42	28	48	22	23	16	31	23	21	17	21	20	9	17	19	16	16	8	17	14	13	17	18	12	488	construction machine
materials	36	24	21	34	22	19	21	22	24	13	7	12	13	8	10	12	6	10	5	6	4	5	7	11	352	materials
natural environment	30	30	24	21	23	18	15	16	8	9	11	10	21	10	11	19	15	3	12	6	5	16	5	7	345	natural environment
tools	10	4	9	12	11	11	13	7	6	10	7	4	5	3	5	4	4	5	4	7	7	3	10	7	168	tools
general machine	26	19	23	10	11	16	12	15	17	9	7	4	4	5	13	4	5	7	13	5	4	9	4	5	247	general machine
other equipments, facilities	6	6	3	6	9	5	2	3	3	6	4	4	5	2	7	2	1	1	2		7	2	1	2	89	other equipments, facilities
power transmission mechanism	6	4	4	4	3	2	3	4	5	4	1	1	3	3	3	3	5	5	1	4		4	2	2	76	power transmission mechanism
welding equipment	5	1	1	1	1		2	1			1		1		1	1						1	1	2	20	welding equipment

[illegible]

chemical facilities							1																		1	chemical facilities
unclassifiable												1													1	unclassifiable
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

Transition of Causal agents (Small) of fatal and non-fatal accidents in 020201 quarrying in Japan (1999-2022)

[illegible]

buildings, establishments			2		1			2	1	1	4	1	1		1	6	1	1	1	4	6			3	36	buildings, establishments
other general power machines			11		5		6	10	11	6	2	2	2	2	5	3	2	3	6	4	3	5	3	2	93	other general power machines
working platform, boot board			6		3		4	4	1	3	1	2		1	4	5	6	5	3	7	4	1	5	2	67	working platform, boot board
other equipment, facilities			3		9		2	3	3	6	4	4	5	2	7	2	1	1	2		7	2	1	2	66	other equipment, facilities
power transmission mechanism			4		3		3	4	5	4	1	1	3	3	3	3	5	5	1	4		4	2	2	60	power transmission mechanism
hand tool			10		4		4	8	5	4	1	3	5	2	2	3	3	2	4	3	2	1	3	1	70	hand tool
stairs, landing stage			3		7		1	4	4	4	4	1	2	3	3	3	2		1	4	4	3	4	1	58	stairs, landing stage
no causal agent			4		6		2	1	4	3	4	3	2	1		2	5	3	1	3	4	3	2	1	54	no causal agent
other environments			4		1			1			2	1	4	1	2	6	2	1	2	1		1	1	1	31	other environments
cars, bus, motorcycle			1		5		1	3	1	2			1			2		1	2	1	3	1		1	25	cars, bus, motorcycle
slinging tool			2		3		2	2	1	3	2				1	1	1	1		3	1		1	1	25	slinging tool
loader			3		2		3	2	1		1			1		1		3	1	2	1	1		1	23	loader
roof, beam, haze, crossbeam, principal rafter			2		1		2		1	1	2	1											1	1	12	roof, beam, haze, crossbeam, principal rafter
other powered crane			3				1			1		1			1				2				1	1	11	other powered crane
gas welding equipment					1		1				1		1		1	1						1		1	8	gas welding equipment

machine/equipment as load			1		1				1			1			1								1	1	7	machine/equipment as load
lumber, bamboo			1		1			1				1	1											1	6	lumber, bamboo
arc welding equipment			1					1															1	1	4	arc welding equipment
other construction machines			7		3		2	1	2	2	2	2	1		2	1	1	3	1	1		1	1		33	other construction machines
crane			2		2		1	3	2	1		1	1	2	1				2	1	3	4			26	crane
load			2		2		1		2	2	2	3	2			1				1	2	3	2		25	load
scaffolding			1		1		2	2	3			2	2	1		3		1		1		2	2		23	scaffolding
mobile crane			1					1	1			1	1	1		4	2	2			2				16	mobile crane
other powered conveying machines			2					1	1		1	2	1		1	1	1	3			2				16	other powered conveying machines
standing tree			2		4		1		1				2	1		1	1		1			1			15	standing tree
opening			1		2			1	3		1	1	1			1			1				1		13	opening
forklift					1		1	1	1		2		1	1	1		1		1			1			12	forklift
other causal agent			1				2	1	2				1	1	1		1					1	1		12	other causal agent
demolition machine			1				2	1			1				1				1	2	1	1			11	demolition machine
high/cold temperature environment			1		2		1					1	1		1				1		2	1			11	high/cold temperature environment
other materials			1		1		1		1				1		1			1	1	1					9	other materials
grinding machine, buffing machine			2						1	1				2	2										8	grinding machine, buffing machine

[illegible]

[illegible]

silviculture machine																										silviculture machine
derrick crane																										derrick crane
elevator, lift																										elevator, lift
cargo lifting appliance																										cargo lifting appliance
gondola																										gondola
simple skyline yarding equipment																										simple skyline yarding equipment
straddle carrier																										straddle carrier
rough terrain hauler																										rough terrain hauler
railway vehicle																										railway vehicle
boiler																										boiler
other pressure vessels																										other pressure vessels
industrial dryer																										industrial dryer
other kiln, caldron																										other kiln, caldron
other electrical equipment																										other electrical equipment
timbering																										timbering
flammable substance																										flammable substance
flammable gas																										flammable gas
radiation																										radiation
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

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	Age
50-59	114	90	92	64	75	60	83	64	67	44	41	33	39	31	34	35	33	21	39	26	32	34	46	34	1,231	50-59
40-49	57	50	61	48	43	36	39	36	44	25	30	27	20	33	27	33	27	26	35	25	32	28	13	28	823	40-49
60 years old or more	55	45	43	42	41	24	29	22	33	33	36	33	27	21	43	37	29	34	34	42	28	40	37	24	832	60 years old or more
30-39	43	30	27	28	30	28	27	37	18	23	22	20	23	16	18	28	18	15	12	14	7	9	12	11	516	30-39
20-29	36	29	25	14	15	12	10	13	12	10	6	7	7	4	16	8	6	4	6	6	7	7	4	4	268	20-29
19 years old or less	2	1		4	4	2	5	2	1						4	1		2			1		1		30	19 years old or less
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

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	Workers scale
10-29	144	123	139	98	109	82	87	96	90	77	76	55	54	56	68	73	54	61	66	63	62	56	55	43	1,887	10-29
9 workers or less	120	78	70	74	79	62	82	61	67	44	50	51	44	36	53	48	42	29	41	30	17	39	36	34	1,287	9 workers or less
30-49	37	38	32	23	16	15	18	17	17	12	7	12	17	11	18	17	15	10	13	17	22	18	15	20	437	30-49
50-99	3	6	7	5	4	3	3		1	1	2	2	1	2	3	3	2	1	6	3	3	3	5	2	71	50-99
100-299	3						2			1						1		1			3	2	2	2	17	100-299
300 workers or more							1																		1	300 workers or more
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

[illegible]

Month	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	Month
September	29	18	19	16	18	12	10	14	21	11	17	14	11	8	7	7	11	2	9	10	12	13	4	14	307	September
November	25	23	23	22	18	9	17	15	16	9	8	11	14	10	16	15	8	6	8	10	7	12	4	13	319	November
July	30	19	19	11	16	14	19	14	9	14	14	12	6	9	11	7	9	13	14	7	7	9	6	10	299	July
March	19	25	29	17	11	15	17	13	13	16	10	14	10	13	9	11	7	14	9	15	8	6	8	9	318	March
May	30	20	21	13	24	13	13	15	15	12	9	11	5	7	15	9	9	5	13	12	8	5	10	9	303	May
December	30	23	16	19	18	11	8	14	16	7	9	9	5	4	18	12	12	7	4	9	9	15	11	9	295	December
October	20	24	30	20	13	16	24	15	14	11	16	8	9	12	11	16	8	8	16	8	14	10	15	8	346	October
August	27	18	15	17	21	18	19	23	17	10	13	13	6	10	11	8	11	8	11	7	5	6	11	7	312	August
June	23	20	17	17	17	16	19	13	6	13	15	7	18	10	10	16	12	13	12	13	11	11	12	6	327	June
February	24	20	24	16	22	15	18	12	11	9	6	3	17	8	9	18	14	8	11	5	8	7	9	6	300	February
April	29	19	17	17	19	7	13	15	19	12	8	7	6	6	13	15	7	8	11	6	9	15	13	5	296	April
January	21	16	18	15	11	16	16	11	18	11	10	11	9	8	12	8	5	10	8	11	9	9	10	5	278	January
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

Transition of prefectures of fatal and non-fatal accidents in 020201 quarrying in Japan (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	Prefecture
Hokkaido	18	14	14		10		14	7	7	4	5	9	10	5	8	11	5	4	15	6	10	8	9	10	203	Hokkaido
Fukushima	7	12	2		11		11	4	5	5	1	4	2	3	6	3	6	5	3	7	2	2	3	7	111	Fukushima
Ibaraki	6	4	5		8		5	3	6	4	3	2	4	5	2	1	4	3	3	7	4	6	5	7	97	Ibaraki
Okayama	7	9	9		8		7	9	10	7	6	4	6	5	9	7	5	7	9	5	4	5	8	6	152	Okayama
Kumamoto	17	19	9		7		11	12	6	3	5	7	4	5	5	3	2	2	5	4	6	6	3	6	147	Kumamoto
Hyogo	16	11	16		6		11	8	10	7	7	12	8	8	3	8	4	2	3	1	2	8	8	5	164	Hyogo
Miyagi	5	5	3		2		6	8		2	5	1	4	6	6	8	6	3	6	4	3	2	4	5	94	Miyagi

[illegible]

Tottori	3	3	2		4		2	1	2	1	1	1	1		1	1		2	1	1		1		1	29	Tottori
Tokushima	1	2	1		1			2		1	4	1		1		2	1	1	4	1	1	2		1	27	Tokushima
Shiga		3	1				2	2	2		1	1	1		2		1	1	1		1	1		1	21	Shiga
Niigata	3	4	2					2	1	1					1					1			1	1	17	Niigata
Kagawa	18	7	9		8		11	5	7	7	5	3			2	4	2	5	2	3	4	3	1		106	Kagawa
Aomori	6	3	7		9		3	1		3	4	3	1	2	2	2		2	2		2	2	4		58	Aomori
Akita	5	7	2		4		3	2	4		2	1	2	3	4	4	1	2	1	3	4	1	2		57	Akita
Tokyo	8	7	3		1		3	4	4	1	3	1	3	4	2	2	2	1	1	2		2	2		56	Tokyo
Osaka	3	3	7		2		3		1	3	1	3	3	1	1		4	2	5	1	2	3	1		49	Osaka
Oita	5	4	2		3		3	3	4	3	2	2	1	1	2	4	1	3		1	2	2	1		49	Oita
Ishikawa	4	2	5		5		5		1	1	2	1			4	2	2		1			1	2		38	Ishikawa
Gunma	4	1	5		4			2	2	2	3	1	1	1	3	1			1	1	1	1			34	Gunma
Yamanashi	2	1			2		1			1	1	1	2	1				1	1	1	2	2			19	Yamanashi
Wakayama	4	1	2		1		2	2		1							1						1		15	Wakayama
Chiba	2									1	1		1	1			1	1							8	Chiba
Toyama	1	1	2				1									2				1					8	Toyama
Okinawa			1				1								1				1	1					5	Okinawa
total	307	245	248	200	208	162	193	174	175	135	135	120	116	105	142	142	113	102	126	113	107	118	113	101	3,700	total

Data Source : <https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html> MHLW, Jaan

Return to https://www.jisha.or.jp/english/statistics/202312_05.html