Industrial accidents in gravel digging in Japan in 1999-2020

gravel digging industry Code No.020202

Type of accidents in gravel digging in 1999-2020

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
fall from height	31	35	34	23	25	23	31	21	26	25	16	14	23	13	17	17	23	17	16	20	20	22
falling to same level	15	18	14	10	9	7	11	8	8	10	11	4	10	11	10	15	9	5	6	7	8	6
crash	6	14	6	7	4	4	5	7	2	1	4	5	5	1	2	1	1	2	1	6	3	2
struck by flying or falling object	15	12	15	15	12	5	9	8	6	6	8	8	6	3	4	5	6	8	1	6	3	8
collapse	5	2	5	6	1	3	1	3	3	0	1	1	2	1	0	0	2	1	2	2	1	0
crashed by	9	7	0	5	9	1	7	7	7	4	5	5	2	2	4	3	2	3	2	2	3	5
caught in/between	22	31	35	37	31	36	30	25	26	20	16	17	16	22	18	24	12	6	12	12	18	13
cut	0	2	3	6	0	2	0	4	2	0	0	0	0	3	0	2	1	1	3	1	2	1
injury to the sole of the foot	1	0	0	-	0	-	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	0	1	0	-	1	1	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0
contact to high/low-temperature	4	0	5	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	2	0	1	1
contact to harmful substance	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
electric shock	0	1	0	-	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
explosion	0	0	2	-	0	-	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
burst	0	0	0	-	0	-	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
fire	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
traffic accident (public road)	2	4	6	6	2	-	1	0	5	1	4	0	3	2	1	0	2	4	3	3	1	1
traffic accident (others)	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
reaction to motion/improper motion	10	9	3	1	6	11	3	3	2	1	2	3	3	2	4	5	1	0	1	1	4	3
others	1	1	0	-	0	-	1	1	1	0	0	0	0	0	0	0	2	0	1	1	0	0

unclassifiable	0	0	1	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	121	137	129	117	101	95	101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Causal agents (middle) of industrial accidents in gravel digging in 1999-2020

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
engine	0	0	0	1	0	-	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
power transmission mechanism	3	3	5	2	3	3	4	1	1	2	0	0	0	0	1	0	1	1	2	0	3	2
woodworking machine	0	1	1	2	0	-	0	0	1	0	0	0	1	1	0	2	1	0	0	0	1	0
construction machine	13	12	22	10	13	15	16	9	7	4	6	8	11	6	8	9	5	5	6	12	7	9
metal manufacturing machine	0	0	0	2	0	3	0	1	0	1	1	0	1	0	0	1	0	0	0	1	0	0
general machine	7	12	13	16	6	4	8	7	12	2	5	7	3	3	2	4	3	1	3	6	3	5
mobile silviculture machine																	0	0	0	0	0	0
crane	3	0	2	4	1	1	0	2	4	2	2	0	4	0	0	3	2	3	1	0	1	4
conveying machine	28	30	25	32	31	31	19	28	27	28	26	14	20	19	21	21	27	18	18	21	20	16
vehicle	2	4	3	1	1	-	4	0	3	1	0	1	2	3	2	1	2	2	0	2	0	0
pressure vessel	0	0	0	-	0	-	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
chemical facilities	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	1	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
kiln, caldron	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	1	0	-	0	-	0	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0
human power machine, tools	4	4	3	4	3	-	2	3	1	2	2	2	1	1	1	3	3	1	1	0	2	1
tools	7	6	5	6	5	1	8	5	7	5	4	1	3	4	4	2	2	2	6	3	4	5
other equipments, facilities	2	6	3	-	4	3	3	3	2	1	0	3	2	1	1	2	1	0	0	1	1	0
temporary buildings,	21	24	19	15	16	14	19	14	9	8	12	7	16	9	12	15	9	7	7	5	14	9

establishments																						
hazards, harmful substances	0	0	1	-	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0
materials	13	16	16	12	10	6	13	6	6	10	3	5	2	6	3	4	3	4	3	7	3	3
load	1	3	2	-	1	1	1	1	2	0	1	1	0	0	0	0	1	0	0	0	0	0
natural environment	9	11	6	7	3	9	3	6	7	2	3	4	4	4	5	3	3	4	2	1	4	4
other causal agent	1	1	0	-	0	-	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
no causal agent	5	3	2	2	4	3	0	3	0	0	2	2	0	2	2	3	0	0	0	1	0	2
unclassifiable	1	0	1	1	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	121	137	129	117	101	95	101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Causal agents (small) of industrial accidents in gravel digging in 1999-2020

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine			0		0		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
power transmission mechanism			5		3		4	1	1	2	0	0	0	0	1	0	1	1	2	0	3	2
circular sawing machine			0		0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
band sawing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
wood planer machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hollow chisel mortiser, wood borer			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chamfering machine, router, woodworking milling machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chain saw			1		0		0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0
other woodworking machines			0		0		0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
leveling, transporting or loading machine			14		5		9	6	3	2	4	5	4	3	4	4	3	2	3	8	3	8
excavating machine			7		8		5	2	4	2	2	2	7	3	3	4	2	2	2	2	4	1

foundation work machine			0		0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hardening machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
demolition machine			0		0		0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0
vehicle for high lift work			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other construction machines			1		0		1	1	0	0	0	0	0	0	0	1	0	1	1	1	0	0
lathe			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drill press, milling machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
grinding machine, buffing machine			0		0		0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0
power press			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
forging pressure hammer			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
shearing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other metal manufacturing machines			0		0		0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0
centrifugal machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mixer, grinder			4		4		2	4	3	0	3	2	1	1	0	1	2	0	0	1	3	1
roll machine (except printingroll machine)			0		0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
injection molding machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
food manufacturing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
printing machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial robot			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other general power machines			9		2		5	3	9	2	2	5	2	2	2	3	1	1	3	5	0	4
felling machine																	0	0	0	0	0	0
mobile logging machine																	0	0	0	0	0	0
skyline yarding																						

machine																	0	0	0	0	0	0
other mobile silviculture machine																	0	0	0	0	0	0
crane			0		1		0	0	0	2	0	0	1	0	0	2	1	2	1	0	0	0
mobile crane			0		0		0	2	3	0	1	0	3	0	0	1	1	0	0	0	1	2
derrick crane			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
elevator, lift			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cargo lifting appliance			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gondola			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lumberyard equipment, logging cableway			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
simple skyline yarding equipment																	0	0	0	0	0	0
other powered crane			2		0		0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	2
truck			10		8		5	10	11	16	13	7	9	7	11	7	18	15	10	8	10	11
forklift			0		1		0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
railway equipment			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveyor			15		20		12	17	13	12	10	7	9	11	10	14	8	3	6	8	7	5
loader			0		0		1	1	1	0	2	0	2	1	0	0	1	0	1	3	2	0
straddle carrier			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rough terrain hauler			0		0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
other powered conveying machines			0		2		1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0
cars, bus, motorcycle			2		1		3	0	3	0	0	0	2	2	1	1	1	2	0	1	0	0
railway vehicle			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other vehicles			1		0		1	0	0	1	0	1	0	1	1	0	1	0	0	1	0	0
boiler			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pressure vessel			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
other pressure vessels			0		0		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
chemical facilities			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gas welding			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

equipment																						
arc welding equipment			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial dryer			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other kiln, caldron			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transmission			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric power facilities			0		0		0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0
other electrical equipment			0		0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
human power cranes			0		2		0	1	1	0	0	0	0	0	1	1	0	1	0	0	0	0
human power hauling equipment			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
human power machine			1		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool			2		1		2	2	0	2	2	2	1	1	0	2	3	0	1	0	1	1
ladder			2		5		4	2	1	3	1	1	2	2	3	1	2	1	3	0	3	1
slinging tool			2		0		2	0	3	0	2	0	1	1	0	0	0	1	2	1	1	2
other tools			1		0		2	3	3	2	1	0	0	1	1	1	0	0	1	2	0	2
other equipment, facilities			3		4		3	3	2	1	0	3	2	1	1	2	1	0	0	1	1	0
scaffolding			1		1		0	1	0	2	0	1	1	1	0	0	2	1	0	0	1	0
timbering			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
stairs, landing stage			1		2		5	2	3	1	4	1	1	2	2	2	2	3	2	0	2	2
opening			0		0		0	2	0	0	0	0	1	0	0	0	1	0	0	0	1	0
roof, beam, haze, crossbeam, principal rafter			2		0		1	1	0	0	0	0	2	1	0	0	0	0	0	1	0	0
working platform, boot board			1		3		2	0	1	1	3	3	1	0	0	2	0	1	0	0	1	3
passage			5		3		5	2	1	3	3	1	5	2	6	7	2	2	2	3	3	1
building, establishment			5		3		3	5	2	1	1	1	4	2	1	2	0	0	3	1	5	3

other temporary buildings, establishments			4		4		3	1	2	0	1	0	1	1	3	2	2	0	0	0	1	0
explosive substance			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
inflammable substance			1		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
inflammable gas			0		0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
harmful substance			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
radiation			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other hazards, harmful substances			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
metal material			3		8		6	2	3	5	0	3	1	1	2	2	1	2	3	7	1	1
lumber, bamboo			2		1		0	0	1	0	1	0	0	0	0	0	1	1	0	0	1	0
stone, sand, substance			10		1		5	3	1	5	1	2	1	5	0	2	1	1	0	0	1	1
other materials			1		0		2	1	1	0	1	0	0	0	1	0	0	0	0	0	0	1
load			1		1		1	1	2	0	1	1	0	0	0	0	0	0	0	0	0	0
machine/equipment as load			1		0		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
natural ground, rock			2		2		1	2	4	0	1	2	0	1	1	1	1	1	1	0	2	1
standing tree			0		0		0	1	2	0	2	1	0	1	0	0	0	1	0	0	0	0
water			0		0		0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0
abnormal environment			0		0		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
high/cold temperature environment			1		1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
other environments			3		0		2	2	1	2	0	1	4	2	2	2	1	1	1	1	2	2
other causal agent			0		0		1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
no causal agent			2		4		0	3	0	0	2	2	0	2	2	3	0	0	0	1	0	2
unclassifiable			1		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total			129		101		101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Workers age of industrial accidents in gravel digging in 1999-2020

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

19 years old or less	1	2	2	-	0	-	0	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0
20-29	8	22	9	10	4	8	6	5	6	2	4	3	2	3	3	1	2	5	2	2	4	3
30-39	12	14	17	22	10	9	18	16	10	12	8	9	10	7	4	7	6	6	3	2	9	6
40-49	32	25	28	18	22	16	16	15	17	10	11	9	15	17	12	11	13	8	8	17	12	9
50-59	39	44	45	43	40	35	35	32	30	26	27	12	18	19	20	26	13	10	12	16	14	16
60 years old or more	29	30	28	24	25	27	26	20	26	18	17	24	25	16	22	28	29	19	25	24	26	28
total	121	137	129	117	101	95	101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Workers' number of workplace of industrial accidents in gravel digging in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	50	60	49	53	44	51	39	43	44	34	30	27	38	30	25	31	29	20	23	17	22	22
10-29	54	58	58	44	40	32	49	38	33	30	31	25	28	24	25	40	31	23	27	36	35	36
30-49	13	14	16	16	13	8	9	4	13	4	5	5	4	5	9	2	4	5	0	7	8	4
50-99	3	5	5	4	4	4	4	3	0	0	1	0	0	2	2	1	0	0	0	1	0	0
100-299	1	0	1	—	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
300 workers or more	0	0	0	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	121	137	129	117	101	95	101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Month of industrial accidents in gravel digging in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	11	10	18	6	13	11	3	8	8	5	12	3	7	5	4	4	6	3	4	5	9	5
February	7	16	9	8	14	11	9	11	12	8	1	3	5	9	6	5	6	5	1	5	5	9
March	8	5	13	11	10	6	5	7	8	5	4	7	8	7	6	7	8	4	5	6	4	7
April	7	15	10	8	6	11	11	7	8	9	5	6	8	7	4	9	3	2	6	4	2	6
May	10	12	6	7	8	4	8	8	5	7	6	6	2	4	6	5	9	2	3	3	3	6
June	15	10	10	16	4	6	11	9	8	5	8	4	11	2	7	7	4	2	5	8	3	3
July	16	16	12	6	9	9	12	9	13	5	8	7	7	5	3	7	5	8	4	4	10	4
August	9	12	8	9	12	6	8	10	8	6	4	5	3	3	4	6	6	3	2	5	5	5
September	14	9	13	11	6	12	7	8	6	3	5	3	5	2	5	6	4	3	6	3	4	4
October	9	12	7	6	6	8	9	3	5	6	7	6	2	4	6	6	2	5	2	10	6	6
November	8	11	14	14	9	6	9	9	5	4	3	3	5	7	5	8	4	6	9	4	7	3
December	7	9	9	15	4	5	9	0	4	5	4	4	7	7	6	4	7	5	3	4	7	4

total	121	137	129	117	101	95	101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Prefecture of industrial accidents in gravel digging in 1999-2020

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hokkaido	24	25	11		14		13	13	14	9	17	11	15	11	14	12	17	9	5	10	14	15
Aomori	2	2	3		1		2	2	2	1	1	1	2	1	0	1	1	0	0	1	2	0
Iwate	3	1	3		3		1	1	3	1	2	1	0	0	1	2	2	1	0	0	1	2
Miyagi	1	1	4		2		3	3	1	1	2	1	1	1	1	3	6	1	2	3	0	1
Akita	2	4	3		3		2	6	0	0	0	2	1	0	1	2	1	0	1	2	2	1
Yamagata	5	7	5		2		2	0	2	1	0	1	2	3	2	0	0	2	1	0	1	2
Fukushima	3	2	1		1		0	4	0	0	1	0	1	1	3	3	0	0	4	3	2	3
Ibaraki	7	8	4		3		6	3	2	5	2	4	2	3	1	2	2	2	1	0	2	4
Tochigi	3	4	4		3		6	2	5	5	0	3	2	2	4	2	0	0	1	1	1	2
Gunma	2	2	4		1		2	0	0	2	1	1	2	1	1	0	0	1	2	1	0	0
Saitama	2	3	0		1		2	0	4	0	0	1	2	1	0	0	0	0	1	2	0	0
Chiba	4	5	2		2		1	2	3	1	1	2	2	2	4	1	1	2	4	4	4	2
Tokyo	0	0	0		0		0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Kanagawa	2	2	1		3		1	1	0	1	0	1	1	0	0	1	0	1	0	1	0	2
Niigata	9	8	9		12		9	7	8	6	3	4	5	8	6	5	5	5	3	5	5	3
Toyama	3	3	5		2		6	1	0	3	5	4	3	1	3	2	3	1	1	2	1	1
Ishikawa	0	0	1		1		0	0	0	0	1	0	4	1	0	0	1	1	2	0	1	1
Fukui	1	2	0		1		0	0	0	0	0	0	1	1	1	1	2	2	1	0	0	2
Yamanashi	6	2	6		4		6	3	6	3	0	3	0	2	2	4	1	0	1	2	0	1
Nagano	10	2	10		7		3	1	2	2	3	1	3	1	1	3	0	0	2	2	6	3
Gifu	4	7	6		5		8	5	4	5	3	2	3	2	0	5	2	4	3	8	4	2
Shizuoka	11	2	7		6		3	9	9	6	8	1	5	4	4	3	1	2	3	3	3	2
Aichi	1	1	3		0		1	1	1	0	2	1	1	1	1	3	0	1	1	0	0	1
Mie	0	9	6		7		3	2	4	3	0	0	2	2	3	4	3	2	0	4	0	3
Shiga	2	0	4		3		0	1	0	0	0	1	2	0	0	0	1	0	0	0	0	0
Kyoto	1	1	3		3		2	1	1	0	0	0	1	1	0	0	2	0	2	1	1	1
Osaka	2	0	0		0		0	0	1	1	0	0	0	2	0	0	0	1	0	1	0	0
Hyogo	2	4	4		0		1	1	1	0	3	1	0	1	1	1	0	0	1	0	3	3
Nara	0	1	0		0		0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Wakayama	0	3	2		1		0	0	2	0	1	0	1	1	2	1	1	3	1	1	1	2
Tottori	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shimane	0	2	1		1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Okayama	1	2	2		0		2	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0
Hiroshima	0	2	1		2		1	1	0	1	1	0	1	0	0	1	1	0	0	0	0	0
Yamaguchi	0	2	2		0		1	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0
Tokushima	0	5	2		2		1	2	2	0	0	0	1	1	1	1	0	0	1	1	2	1
Kagawa	0	0	0		0		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ehime	0	1	0		0		1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1
Kochi	2	1	0		0		0	0	1	0	0	0	0	1	0	1	0	0	0	1	1	0
Fukuoka	1	3	5		1		0	1	0	1	2	1	0	0	1	2	2	1	0	0	1	0
Saga	1	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nagasaki	0	0	0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kumamoto	1	4	2		1		1	3	1	4	5	3	1	2	0	1	2	3	1	1	4	1
Oita	1	1	2		2		3	3	1	3	0	1	1	0	1	2	3	2	1	1	0	0
Miyazaki	1	2	1		1		3	5	4	2	1	4	0	1	2	2	3	0	2	0	0	0
Kagoshima	1	1	0		0		4	1	2	0	1	0	1	0	0	0	0	0	0	0	1	0
Okinawa	0	0	0		0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	121	137	129		101		101	89	90	68	67	57	70	62	62	74	64	48	50	61	65	62

Industrial accidents mean fatal and non-fatal injuries with work absence of 4 days and more. Data of 2011 year include Industrial accidents caused by Great East Japan Earthquake in 2011.

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

Return to https://www.jisha.or.jp/english/statistics/2020e_industry.html

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Fatal accidents in gravel digging in Japan in 1999-2020

gravel digging industry Code No.020202

Type of fatal accidents in gravel digging in 1999-2020

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
fall from height	2	0	4	0	0	4	1	2	1	0	1	0	3	0	0	1	1	0	2	0	0	0
falling to same level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
crash	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
struck by flying or	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

falling object																						
collapse	2	0	1	0	1	1	0	1	0	0	1	0	0	1	0	0	0	1	1	0	1	0
crashed by	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1
caught in/between	0	3	1	0	1	1	1	0	1	2	0	1	1	1	1	3	0	0	0	0	1	0
cut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
injury to the sole of the foot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	0	1	0	0	1	1	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0
contact to high/low-temperature	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
contact to harmful substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric shock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
explosion	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
burst	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
traffic accident (public road)	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
traffic accident (others)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
reaction to motion/improper motion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Causal agents (middle) of fatal accidents in gravel digging in 1999-2020

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
engine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
woodworking machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

construction machine	1	0	2	0	0	3	0	1	2	1	1	0	2	0	0	3	0	0	0	0	0	1
metal manufacturing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
general machine	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveying machine	0	3	0	1	0	1	1	0	2	1	0	1	1	1	1	1	1	0	2	0	2	0
vehicle	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pressure vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipments, facilities	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	0	0	0	0	0	1	2	0	0	0	0	0	1	1	1	0	1	0	1	0	0	0
hazards, harmful substances	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
materials	1	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	1	0	1	0	0	2	0	2	0	0	1	0	0	0	1	0	1	1	0	0	1	0
other causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Causal agents (small) of fatal accidents in gravel digging in 1999-2020

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
circular sawing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
band sawing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
wood planer machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hollow chisel mortiser, wood borer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chamfering machine, router, woodworking milling machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chain saw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other woodworking machines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
leveling, transporting or loading machine	0	0	2	0	0	1	0	1	1	1	0	0	1	0	0	2	0	0	0	0	0	1
excavating machine	1	0	0	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
foundation work machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hardening machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
demolition machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle for high lift work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other construction machines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lathe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drill press, milling machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
grinding machine,																						

buffing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power press	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
forging pressure hammer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
shearing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other metal manufacturing machines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
centrifugal machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mixer, grinder	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
roll machine (except printingroll machine)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
injection molding machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
food manufacturing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
printing machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial robot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other general power machines	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
felling machine																	0	0	0	0	0	0
mobile logging machine																	0	0	0	0	0	0
skyline yarding machine																	0	0	0	0	0	0
other mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mobile crane	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
derrick crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
elevator, lift	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cargo lifting appliance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gondola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lumberyard equipment, logging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

cableway																						
simple skyline yarding equipment																	0	0	0	0	0	0
other powered crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
truck	0	0	0	1	0	0	1	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0
forklift	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
railway equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveyor	0	3	0	0	0	1	0	0	0	1	0	1	0	1	1	0	0	0	1	0	1	0
loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
straddle carrier	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rough terrain hauler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
other powered conveying machines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
cars, bus, motorcycle	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
railway vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
boiler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pressure vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other pressure vessels	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gas welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arc welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial dryer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transmission	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric power facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other electrical equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

human power cranes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power hauling equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
slinging tool	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipment, facilities	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
scaffolding	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
timbering	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
stairs, landing stage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
opening	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
roof, beam, haze, crossbeam, principal rafter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
working platform, boot board	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
passage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
building, establishment	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
other temporary buildings, establishments	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
explosive substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
inflammable substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
inflammable gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
harmful substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
radiation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other hazards, harmful substances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal material	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lumber, bamboo	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

stone, sand, substance	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1
other materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
machine/equipment as load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural ground, rock	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0
standing tree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
water	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0
abnormal environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
high/cold temperature environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
other environments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Workers age of fatal accidents in gravel digging in 1999-2020

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
19 years old or less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-29	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
30-39	0	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
40-49	1	2	0	2	2	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0
50-59	2	1	2	0	0	2	1	3	4	1	0	1	0	0	0	2	1	2	0	0	0	0
60 years old or more	1	0	3	0	1	3	1	1	0	0	1	1	3	1	3	3	1	0	3	0	2	2
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Workers' number of workplace of fatal accidents in gravel digging in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	1	2	1	1	1	5	0	1	2	0	0	2	3	2	2	3	1	2	2	0	1	1

10-29	2	2	3	1	1	2	3	2	1	2	2	0	1	0	1	2	2	0	1	0	2	1
30-49	1	0	2	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
50-99	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100-299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300 workers or more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Month of fatal accidents in gravel digging in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	2	2	0	0	0	1	0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0
February	0	1	2	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0
April	0	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
May	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
June	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0
July	0	0	0	0	1	0	0	1	2	0	0	0	1	0	0	1	0	0	0	0	1	0
August	0	0	0	2	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0
September	0	0	2	0	0	2	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	0	1	0
November	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1
December	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

Prefecture of fatal accidents in gravel digging in 1999-2020

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hokkaido	2	0	3	1	1	1	0	1	0	1	0	0	3	0	1	1	0	1	1	0	0	1
Aomori	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iwate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyagi	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Akita	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yamagata	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Fukushima	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ibaraki	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Tochigi	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Gunma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saitama	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chiba	0	2	0	0	0	1	0	0	0	0	0	1	0	0	1	1	0	0	1	0	1	0
Tokyo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kanagawa	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Niigata	0	0	1	0	2	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0
Toyama	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ishikawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Fukui	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yamanashi	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nagano	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Gifu	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Shizuoka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Aichi	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Mie	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Shiga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kyoto	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Osaka	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Hyogo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wakayama	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tottori	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shimane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okayama	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hiroshima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yamaguchi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tokushima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ehime	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Kochi	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Fukuoka	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nagasaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kumamoto	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Miyazaki	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Kagoshima	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	4	4	6	2	4	7	3	4	4	2	2	2	4	3	3	5	3	2	3	0	3	2

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

Return to https://www.jisha.or.jp/english/statistics/2020e_industry.html