

Industrial accidents in subway construction work in Japan in 1999-2020

subway construction work industry Code No.030103

Type of accidents in subway construction work 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	12	7	4	3	4	2	0	5	1	5	1	3	0	1	2	1	1	3	1	0	0	0
falling to same level	7	1	0	3	1	1	1	2	0	0	2	1	0	2	1	1	1	1	0	2	1	1
crash	3	2	0	1	0	-	1	0	0	0	1	0	0	0	1	0	0	0	0	2	1	0
struck by flying or falling object	10	3	2	2	0	4	5	0	1	2	1	2	0	0	1	0	0	1	0	1	0	0
collapse	5	2	2	1	0	-	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
crashed by	3	1	5	1	1	1	1	0	3	0	1	3	1	0	1	1	0	0	0	0	0	0
caught in/between	4	5	3	1	3	2	1	2	1	3	1	2	1	0	0	0	1	1	2	0	2	4
cut	1	0	0	-	0	1	0	3	1	0	1	0	0	0	0	0	0	0	0	1	1	0
injury to the sole of the foot	0	0	0	-	0	-	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	0	0	0	1	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	0	2	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contact to harmful substance	0	0	0	-	0	-	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
electric shock	0	1	0	-	0	-	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
explosion	0	0	0	-	0	-	0	0	0	0	0	0	0	0	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
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)	9	0	1	1	0	5	0	0	0	0	0	0	4	2	0	0	0	6	0	0	0	0
traffic accident (others)	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	3	0	0	-	0	-	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0
others	0	0	0	-	0	-	0	0	0	0	0	0	0	0	1	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
total	57	24	17	14	9	16	10	14	8	13	9	12	6	5	7	3	3	12	4	7	5	5

Causal agents (middle) of industrial accidents in subway construction work 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
power transmission mechanism	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
woodworking machine	1	0	0	-	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
construction machine	1	2	2	-	2	1	2	0	1	0	1	2	0	0	0	1	0	1	1	0	0	2
metal manufacturing machine	0	0	0	-	0	-	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0
general machine	0	1	0	-	0	-	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
mobile silviculture machine																	0	0	0	0	0	0
crane	4	1	3	1	0	-	2	1	2	1	0	0	0	0	0	0	0	0	0	1	1	1
conveying machine	3	1	0	-	0	5	0	1	0	1	0	1	4	1	0	0	0	1	0	0	0	0
vehicle	8	0	1	1	0	-	0	0	0	0	0	0	0	2	0	0	0	6	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
chemical facilities	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
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	0	0	0	1	0	0	0	0	0	0	0	0	0	0
human power machine, tools	3	0	0	2	0	1	1	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0
tools	7	2	1	1	2	-	2	0	0	4	1	2	0	0	0	0	0	1	1	1	0	0
other equipments, facilities	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings,	14	8	6	5	3	4	0	7	1	4	2	4	1	1	4	1	2	3	1	4	1	1

establishments																						
hazards, harmful substances	0	2	0	-	0	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
materials	12	4	3	-	1	3	1	1	1	1	4	2	1	0	1	0	0	0	0	1	0	0
load	2	1	1	2	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
natural environment	0	0	0	1	0	-	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
other causal agent	0	0	0	-	0	-	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
no causal agent	2	1	0	1	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
total	57	24	17	14	9	16	10	14	8	13	9	12	6	5	7	3	3	12	4	7	5	5

Causal agents (small) of industrial accidents in subway construction work 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
power transmission mechanism			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
circular sawing machine			0		0		0	1	1	0	1	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
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			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other woodworking machines			0		1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
leveling, transporting or loading machine			1		1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
excavating machine			1		1		0	0	1	0	0	2	0	0	0	0	0	1	0	0	0	2

equipment																						
arc welding equipment			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
kiln, caldron			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
other kiln, caldron			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
electric power facilities			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	1	0	0	0	0	0	0	0	0	0	0	0	0
human power cranes			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power hauling equipment			0	0	1	0	0	0	0	0	0	0	1	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
hand tool			0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ladder			0	1	0	0	0	4	1	0	0	0	0	0	0	1	1	0	0	0	0	0
slinging tool			1	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
other tools			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
other equipment, facilities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
scaffolding			1	2	0	2	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0
timbering			2	1	0	1	0	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0
stairs, landing stage			0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3	0	0	0
opening			1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	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
working platform, boot board			1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
passage			0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1
building, establishment			1	0	0	0	0	2	0	0	0	0	1	1	0	1	0	0	0	0	0	0

19 years old or less	1	1	0	-	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
20-29	13	2	3	2	1	4	1	2	1	1	2	0	1	0	1	0	0	1	0	0	0	0
30-39	7	5	2	6	2	3	3	3	4	3	1	3	2	1	2	0	1	1	0	0	2	0
40-49	14	7	4	2	3	4	1	2	2	5	1	5	1	4	1	2	1	5	2	4	0	0
50-59	16	7	6	2	3	3	5	5	1	4	3	1	0	0	1	0	1	2	1	1	2	5
60 years old or more	6	2	2	2	0	1	0	2	0	0	2	3	1	0	2	1	0	3	1	2	1	0
total	57	24	17	14	9	16	10	14	8	13	9	12	6	5	7	3	3	12	4	7	5	5

Workers' number of workplace of industrial accidents in subway construction work 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	19	9	5	2	3	6	3	6	4	7	4	4	4	1	3	0	2	5	3	3	1	0
10-29	15	5	5	7	2	4	4	6	2	6	4	7	2	2	1	1	0	2	0	4	4	4
30-49	11	3	2	2	3	5	1	2	2	0	1	0	0	2	1	2	1	5	1	0	0	0
50-99	10	5	2	2	1	1	2	0	0	0	0	1	0	0	2	0	0	0	0	0	0	1
100-299	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300 workers or more	0	0	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	57	24	17	14	9	16	10	14	8	13	9	12	6	5	7	3	3	12	4	7	5	5

Month of industrial accidents in subway construction work 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	6	5	0	1	0	0	0	3	0	0	0	2	0	0	1	0	0	1	0	0	0	2
February	2	0	1	1	0	2	3	2	0	1	0	0	0	2	2	1	1	0	0	0	0	0
March	3	5	2	1	2	0	0	1	1	1	1	0	4	0	0	0	2	0	1	1	0	0
April	4	1	1	2	0	2	1	1	3	0	1	2	0	0	0	1	0	1	0	0	0	0
May	9	3	0	2	0	0	1	1	0	0	0	3	0	0	0	0	0	0	1	1	0	0
June	3	2	1	1	0	11	0	0	2	0	0	2	0	0	0	1	0	6	0	1	3	0
July	8	1	1	2	0	0	2	3	0	2	0	0	0	0	0	0	0	1	1	1	0	1
August	4	1	0	1	1	0	1	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0
September	5	3	1	1	1	0	1	1	0	2	0	0	0	0	1	0	0	0	0	2	0	0
October	8	2	3	-	2	1	0	1	1	2	2	0	0	0	1	0	0	0	0	0	1	1
November	4	1	3	2	1	0	0	1	0	1	2	1	1	2	1	1	1	1	1	1	0	0
December	1	0	4	-	2	0	1	0	0	3	1	2	0	1	1	0	0	1	0	0	0	1

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyazaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagoshima	0	0	0	0	0	0	0	0	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	1	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

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