

Industrial accidents in city water service in Japan in 1999-2020

city water service industry Code No.011603

Type of accidents in city water service 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	4	10	11	6	7	8	13	5	11	13	12	11	10	13	8	9	10	11	15	9	8	16
falling to same level	16	7	12	8	13	14	8	12	11	9	17	10	17	17	5	12	8	10	11	17	11	11
crash	2	3	3	2	2	1	1	2	2	7	3	2	1	3	3	2	2	0	0	1	1	3
struck by flying or falling object	1	3	2	3	2	1	4	2	2	1	1	4	3	3	2	3	3	1	1	3	3	0
collapse	1	0	0	1	1	1	0	2	0	0	0	1	0	0	1	0	0	1	0	0	1	1
crashed by	1	1	3	-	0	1	1	0	3	1	1	1	0	0	1	1	1	0	2	0	1	2
caught in/between	3	2	7	3	4	3	4	2	7	3	7	3	3	2	2	3	2	1	1	2	4	5
cut	1	1	0	2	0	3	1	3	0	0	3	0	4	4	1	1	1	1	0	3	0	2
injury to the sole of the foot	0	1	0	-	1	-	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
drown	0	0	0	-	0	2	0	1	0	0	1	0	4	0	0	0	0	1	1	0	0	0
contact to high/low-temperature	0	0	0	-	0	-	0	0	3	1	1	2	0	0	0	0	0	1	0	1	0	0
contact to harmful substance	1	1	0	2	1	2	0	2	1	1	0	0	0	0	0	1	2	1	0	0	0	2
electric shock	1	2	0	1	0	-	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
traffic accident (public road)	3	9	9	7	11	12	4	7	6	8	13	7	7	8	10	8	9	5	8	5	9	5
traffic accident (others)	0	0	0	-	0	-	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
reaction to motion/improper motion	4	8	10	4	5	1	8	12	4	6	5	8	8	6	3	8	4	3	7	4	4	3
others	0	1	2	-	0	1	2	0	1	2	0	0	2	1	0	1	0	0	1	0	0	2

unclassifiable	0	0	0	1	0	-	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
total	38	49	59	40	47	50	46	51	51	54	66	52	60	57	36	49	43	36	47	45	42	53

Causal agents (middle) of industrial accidents in city water service 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	1	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	0	0	-	0	1	0	1	0	0	1	0	3	0	1	1	2	0	0	0	0	0
woodworking machine	0	0	0	1	0	2	0	1	0	0	1	0	1	1	0	1	0	0	0	1	0	1
construction machine	0	0	1	-	0	-	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0
metal manufacturing machine	0	0	0	-	0	-	1	0	1	0	0	0	0	2	0	0	1	0	0	1	0	0
general machine	1	3	1	4	1	1	2	2	2	1	0	0	2	1	1	0	0	1	1	0	3	3
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	1	-	0	-	0	3	1	0	0	1	0	0	0	0	0	0	0	0	1	1
conveying machine	1	0	1	3	1	-	2	2	2	1	5	6	2	3	1	0	5	2	1	0	0	0
vehicle	4	11	11	9	10	16	4	9	7	12	17	9	10	7	9	8	7	4	8	7	9	6
pressure vessel	0	0	0	-	1	-	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	2	2	1	0	-	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	1
human power machine, tools	1	1	2	3	0	1	3	2	0	1	3	2	2	0	2	4	0	1	3	2	1	0
tools	0	2	3	1	4	3	1	1	4	5	4	1	3	1	3	3	2	4	2	3	4	7
other equipments, facilities	2	2	0	-	2	-	1	2	1	1	1	1	1	1	1	2	2	2	1	1	1	5
temporary buildings,	18	16	23	12	20	16	17	15	21	22	23	19	25	28	14	20	17	16	23	23	19	23

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	1	0	0	0	0	0	0	0	1
electric power facilities			0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
other electrical equipment			2	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
human power hauling equipment			1	0	1	1	0	1	0	0	1	0	0	2	0	1	1	0	1	0	0	0
human power machine			0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
hand tool			1	0	2	1	0	0	3	2	1	0	2	1	0	0	2	2	0	0	0	0
ladder			3	2	1	1	3	5	4	1	2	1	2	2	2	3	2	2	1	4	0	4
slinging tool			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other tools			0	2	0	0	0	0	0	0	1	0	1	1	0	1	0	1	3	3	0	3
other equipment, facilities			0	2	1	2	1	1	1	1	1	1	1	2	2	2	1	1	1	5	0	5
scaffolding			0	1	1	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
stairs, landing stage			3	2	5	2	5	5	5	7	9	12	1	4	4	5	6	4	2	9	0	9
opening			1	0	2	0	1	2	2	0	0	1	1	1	1	2	3	0	2	2	0	2
roof, beam, haze, crossbeam, principal rafter			0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
working platform, boot board			0	2	1	3	0	2	2	2	2	0	0	1	3	2	0	1	0	1	0	1
passage			6	7	3	5	7	6	2	3	6	8	2	8	6	4	7	13	11	5	0	5
building, establishment			7	6	3	4	6	6	9	7	5	1	8	3	2	2	3	2	2	0	0	0

19 years old or less	0	0	1	1	1	-	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0
20-29	2	5	5	3	3	5	3	2	3	2	5	5	2	2	2	1	1	3	2	1	7	3
30-39	8	6	8	5	5	7	12	5	13	11	10	6	8	6	8	6	2	2	4	3	3	2
40-49	7	6	10	8	12	9	10	10	6	12	16	8	13	14	7	11	10	8	13	12	11	11
50-59	14	21	20	16	17	19	13	23	18	21	19	16	21	18	11	15	9	16	11	14	12	15
60 years old or more	7	11	15	7	9	10	8	11	11	8	16	17	16	17	8	15	20	7	17	14	9	22
total	38	49	59	40	47	50	46	51	51	54	66	52	60	57	36	49	43	36	47	45	42	53

Workers' number of workplace of industrial accidents in city water service 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	9	3	12	6	10	7	10	9	4	3	5	3	6	10	3	4	5	3	3	2	6	4
10-29	9	15	10	12	12	16	13	12	15	16	19	14	13	16	13	9	9	10	8	16	9	13
30-49	4	12	11	3	7	9	8	7	11	10	17	14	12	11	7	15	10	10	13	11	12	9
50-99	8	6	12	3	7	9	4	13	10	13	10	6	13	11	6	11	9	5	11	11	5	5
100-299	4	12	11	12	10	9	8	10	8	11	12	11	11	7	4	9	9	6	6	5	8	15
300 workers or more	4	1	3	4	1	0	3	0	3	1	3	4	5	2	3	1	1	2	6	0	2	7
total	38	49	59	40	47	50	46	51	51	54	66	52	60	57	36	49	43	36	47	45	42	53

Month of industrial accidents in city water service 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	5	2	4	-	6	4	3	8	4	1	4	3	3	6	7	5	3	3	3	2	3	6
February	6	4	5	4	2	4	9	8	4	5	9	6	6	5	1	2	5	3	4	6	4	4
March	2	3	10	2	4	5	4	3	5	6	5	4	9	5	2	4	3	1	2	2	1	2
April	1	3	5	8	6	6	1	3	3	2	8	2	5	6	2	4	7	1	2	7	0	5
May	4	4	8	3	5	2	4	5	7	8	5	7	4	8	4	3	4	2	3	1	4	8
June	4	6	2	5	5	5	3	2	3	7	1	6	5	3	3	4	2	1	8	4	7	7
July	1	7	7	3	5	7	8	3	4	9	4	4	4	3	3	2	3	2	3	4	3	5
August	3	1	3	2	4	7	6	6	6	3	7	8	5	4	3	3	3	7	4	5	2	2
September	6	4	3	3	3	2	1	2	6	7	5	4	6	0	2	8	2	4	3	3	2	4
October	1	6	6	1	3	3	3	4	1	3	8	2	6	2	5	4	6	4	6	4	6	6
November	4	7	4	7	3	3	1	3	3	1	5	5	3	9	1	6	3	5	3	3	6	1
December	1	2	2	2	1	2	3	4	5	2	5	1	4	6	3	4	2	3	6	4	4	3

construction machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
conveying machine	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle	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
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	1	0	0	0	0	0	0	0	1	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	1
other equipments, facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	0	0	1	0	1	0	2	0	1	0	0	0	0	0	1	1	1	2	0	0	1	
hazards, harmful substances	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
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
natural environment	0	0	0	0	0	1	0	1	1	0	1	0	5	0	0	1	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	2	0	1	3	2	1	3	1	1	0	5	0	0	2	2	2	2	0	0	2

stone, sand, substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	1	0	5	0	0	0	0	0	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	0	0	0	0	0	0
other environments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	2	0	1	3	2	1	3	1	1	0	5	0	0	2	2	2	2	0	0	2

Workers age of fatal accidents in city water service 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	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
30-39	0	0	0	0	0	2	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0
40-49	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
50-59	0	1	2	0	0	1	1	0	1	0	1	0	1	0	0	1	1	2	0	0	0	0
60 years old or more	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	2	0	0	2
total	0	1	2	0	1	3	2	1	3	1	1	0	5	0	0	2	2	2	2	0	0	2

Workers' number of workplace of fatal accidents in city water service 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0

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	1	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	2	0	1	3	2	1	3	1	1	0	5	0	0	2	2	2	2	0	0	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