

Industrial accidents in chemical fertilizer products in Japan in 1999-2020

chemical fertilizer products industry Code No.010809

Type of accidents in chemical fertilizer products 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	17	16	17	15	16	12	12	19	7	21	11	8	16	10	10	6	7	10	8	12	12	5
falling to same level	8	6	5	4	7	2	7	11	9	18	8	10	12	4	5	6	6	15	8	10	10	8
crash	3	2	5	2	6	-	4	5	6	2	5	4	5	0	4	6	5	5	2	2	1	2
struck by flying or falling object	6	3	1	7	0	11	3	7	4	2	1	2	2	1	4	0	2	3	2	6	0	3
collapse	2	2	4	2	1	-	1	0	3	1	1	2	1	1	0	0	2	1	0	1	1	0
crashed by	5	4	4	4	1	2	4	3	5	3	4	2	4	2	4	5	0	2	2	1	2	1
caught in/between	27	24	25	19	24	23	30	20	15	18	25	23	17	21	17	14	11	20	12	10	17	15
cut	6	4	3	2	4	5	4	2	8	5	2	0	7	0	2	2	2	1	1	1	1	2
injury to the sole of the foot	0	1	0	-	0	-	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0
drown	0	1	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	5	0	5	3	2	2	4	2	3	3	2	2	5	0	3	2	2	1	1	4	1	0
contact to harmful substance	2	3	3	2	1	7	1	2	2	3	0	3	1	0	0	2	1	5	1	1	0	2
electric shock	0	0	0	-	0	-	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0
explosion	0	0	0	1	0	2	0	0	1	1	0	0	0	0	2	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	1	-	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
traffic accident (public road)	2	1	2	3	1	3	1	0	1	1	0	0	1	1	1	3	0	0	1	3	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
reaction to motion/improper motion	7	6	6	3	2	4	6	7	8	8	7	9	4	5	3	6	5	3	7	9	5	2
others	0	0	1	-	0	-	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

unclassifiable	0	1	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40

Causal agents (middle) of industrial accidents in chemical fertilizer products 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	1	-	1	-	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
power transmission mechanism	1	2	1	1	2	-	2	0	1	3	0	1	2	1	4	0	0	2	0	0	2	1
woodworking machine	0	2	0	-	2	1	2	2	1	0	1	0	1	0	0	0	0	0	0	1	1	0
construction machine	2	0	2	2	2	-	0	0	0	0	2	1	1	0	0	2	0	0	0	0	1	0
metal manufacturing machine	1	0	1	-	0	-	1	1	2	4	3	0	1	0	1	1	0	2	0	0	1	0
general machine	11	13	9	7	12	14	14	10	14	6	11	13	11	10	9	8	7	11	5	6	5	8
mobile silviculture machine																	0	0	0	0	0	0
crane	1	1	0	1	0	1	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1
conveying machine	20	21	17	15	11	12	18	20	10	17	15	13	14	9	11	9	9	13	6	8	11	10
vehicle	1	2	2	2	1	3	0	0	1	0	0	0	0	1	2	1	0	0	1	3	0	0
pressure vessel	0	0	0	-	0	-	2	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0
chemical facilities	1	1	0	-	1	-	0	0	1	1	0	0	0	0	0	0	0	3	0	1	0	0
welding equipment	1	0	0	-	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
kiln, caldron	2	0	1	-	0	-	1	1	1	2	1	3	0	1	1	0	0	0	0	0	0	1
electric equipment	0	0	0	-	0	-	0	0	1	0	0	1	0	0	1	0	0	0	1	0	0	0
human power machine, tools	2	2	2	1	2	4	3	0	5	3	3	2	1	0	3	1	0	1	0	0	3	1
tools	3	5	8	6	7	4	3	5	7	6	8	3	10	3	3	3	4	6	7	7	10	6
other equipments, facilities	5	2	7	1	5	5	3	5	3	4	3	0	5	3	2	1	4	3	2	4	1	1
temporary buildings,	10	11	13	13	11	9	11	19	10	21	9	8	13	6	7	8	8	12	12	15	8	4

establishments																						
hazards, harmful substances	1	3	4	3	2	9	1	2	4	3	0	3	1	0	3	3	2	4	0	2	0	2
materials	7	1	2	3	0	1	6	4	2	0	0	4	4	2	1	3	2	1	3	1	2	2
load	13	4	7	9	5	5	5	6	7	11	5	7	6	4	5	7	6	6	4	6	3	3
natural environment	4	0	1	1	1	2	3	1	1	1	1	1	4	0	0	1	2	3	2	2	1	0
other causal agent	3	2	1	1	0	2	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0
no causal agent	1	2	2	1	0	-	3	2	1	3	3	3	1	3	1	3	1	0	2	3	2	0
unclassifiable	0	0	1	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40

Causal agents (small) of industrial accidents in chemical fertilizer products 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			1		1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
power transmission mechanism			1		2		2	0	1	3	0	1	2	1	4	0	0	2	0	0	2	1
circular sawing machine			0		1		2	1	1	0	0	0	1	0	0	0	0	0	0	1	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	1	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	1	0
other woodworking machines			0		1		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
leveling, transporting or loading machine			2		2		0	0	0	0	2	1	1	0	0	1	0	0	0	0	1	0
excavating machine			0		0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0





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



19 years old or less	2	5	0	1	1	3	1	0	0	0	1	0	0	2	2	3	0	1	1	2	0	0
20-29	13	9	11	13	10	9	13	9	12	13	7	6	12	9	6	6	6	3	5	4	9	4
30-39	16	19	18	10	13	20	15	16	23	21	16	19	14	10	13	11	8	15	11	5	8	8
40-49	20	15	14	14	13	12	19	22	10	15	17	16	21	10	8	10	14	17	14	26	15	15
50-59	29	19	28	22	20	20	20	19	18	22	18	15	13	7	16	12	10	16	9	14	12	6
60 years old or more	10	7	11	7	8	9	11	12	10	15	7	9	15	7	10	11	7	16	6	9	7	7
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40

Workers' number of workplace of industrial accidents in chemical fertilizer products 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	18	14	15	12	13	15	27	20	8	19	14	12	17	6	9	8	6	8	3	12	8	4
10-29	32	30	28	26	21	28	21	28	19	24	18	13	31	17	21	21	14	27	12	14	17	13
30-49	13	13	17	11	12	9	10	14	15	14	15	14	12	5	8	8	9	14	12	4	8	7
50-99	12	4	8	6	9	10	12	11	15	13	9	15	11	4	9	7	4	9	16	14	8	6
100-299	12	11	12	10	6	8	7	4	12	10	8	8	2	8	5	3	11	8	3	10	7	7
300 workers or more	3	2	2	2	4	3	2	1	4	6	2	3	2	5	3	6	1	2	0	6	3	3
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40

Month of industrial accidents in chemical fertilizer products 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	14	5	11	5	3	6	5	5	6	3	5	4	9	5	5	7	5	5	5	7	3	0
February	5	5	14	5	6	8	5	8	8	10	3	5	10	5	8	5	6	5	7	8	4	2
March	11	7	5	7	10	6	5	5	4	14	11	8	7	3	6	4	4	7	3	6	6	3
April	5	10	6	7	5	5	10	7	7	8	8	5	8	5	3	3	2	9	5	2	8	2
May	10	2	6	6	6	3	7	6	3	6	6	5	4	2	4	2	4	3	3	6	3	3
June	8	7	9	4	5	5	3	8	7	7	8	5	3	5	1	4	4	6	3	3	4	8
July	3	6	7	6	4	3	6	6	3	5	3	5	7	4	2	3	5	3	5	2	0	3
August	7	9	2	7	8	7	7	6	6	6	6	6	6	5	5	2	3	2	0	4	6	6
September	3	5	3	4	5	8	10	7	7	9	6	4	6	2	2	6	1	4	3	3	6	4
October	6	11	5	4	5	9	9	2	6	7	3	4	8	2	7	11	4	10	3	7	3	5
November	6	3	5	9	3	10	4	8	9	8	3	9	3	5	7	3	3	9	3	5	4	1
December	12	4	9	3	5	3	8	10	7	3	4	5	4	2	5	3	4	5	6	7	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	1	0	0	0	0	0	0	0	0	0	1	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	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle	0	0	0	1	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	1	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
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	1	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	0	0	2	2	1	1	1	0	1	0	0	0	0	0	0	1	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	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	0	0	0	2	2	1	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0

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](https://www.jisha.or.jp/english/statistics/2020e_industry.html)