

Fatal and non-fatal accidents in chemical fertilizer products in Japan in 1999-2022

chemical fertilizer products industry Code No.010809

Type of accidents in chemical fertilizer products in 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
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	9	10	286
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	13	13	205
crash	3	2	5	2	6		4	5	6	2	5	4	5		4	6	5	5	2	2	1	2	4	1	81
struck by flying or falling object	6	3	1	7		11	3	7	4	2	1	2	2	1	4		2	3	2	6		3		3	73
collapse	2	2	4	2	1		1		3	1	1	2	1	1			2	1		1	1		1		27
crashed by	5	4	4	4	1	2	4	3	5	3	4	2	4	2	4	5		2	2	1	2	1	3		67
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	13	17	457
cut	6	4	3	2	4	5	4	2	8	5	2		7		2	2	2	1	1	1	1	2	1		65
injury to the sole of the foot		1														1	1		1						4
drown		1																							1
contact to high/low-	5		5	3	2	2	4	2	3	3	2	2	5		3	2	2	1	1	4	1		2	2	56

temperature																									
contact to harmful substance	2	3	3	2	1	7	1	2	2	3		3	1			2	1	5	1	1		2	2	3	47
electric shock									1								2								3
explosion				1		2			1	1					2										7
burst																									
fire			1				1																		2
traffic accident (public road)	2	1	2	3	1	3	1		1	1			1	1	1	3			1	3	1		1		27
traffic accident (others)																									
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	6	5	133
others			1				1										1						15	1	19
unclassifiable		1																							1
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Causal agents (large) of fatal and non-fatal accidents in chemical fertilizer products in 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
machine	15	17	14	10	19	15	19	13	18	13	17	15	16	11	14	11	7	15	6	7	10	9	12	7	310

crane, conveying machine	22	24	19	18	12	16	18	20	11	17	15	14	14	11	13	12	9	13	7	11	11	11	8	9	335
other equipment	14	10	18	8	15	14	12	11	19	17	15	9	16	8	11	5	8	14	10	12	14	9	12	10	291
temporary buildings, establishments	10	11	13	13	11	9	11	19	10	21	9	8	13	6	7	8	8	12	12	15	8	4	11	11	260
substance, material	8	4	6	6	2	10	7	6	6	3		7	5	2	4	6	4	5	3	3	2	4	4	5	112
load	13	4	7	9	5	5	5	6	7	11	5	7	6	4	5	7	6	6	4	6	3	3	1	7	142
environment	4		1	1	1	2	3	1	1	1	1	1	4			1	2	3	2	2	1		2	3	37
others	4	4	4	2		2	4	2	1	3	4	4	1	3	1	3	1		2	4	2		20	3	74
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Causal agents (middle) of fatal and non-fatal accidents in chemical fertilizer products in 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
engine			1		1														1						3
power transmission mechanism	1	2	1	1	2		2		1	3		1	2	1	4			2			2	1	2		28
woodworking machine		2			2	1	2	2	1		1		1							1	1				14

demolition machine																								
vehicle for high lift work																								
other construction machines																								
lathe									1					1						1				3
drill press, milling machine															1									1
grinding machine, buffing machine									2	1						2						1		6
power press						1		1	1	1													1	5
forging pressure hammer																								
shearing machine										1														1
other metal manufacturing machines			1					1	1				1											4
centrifugal machine												1												1
mixer, grinder						2	3	5	4	3	3	1	2	2	2	2	3	1		1		1	1	36
roll machine (except printingroll machine)			1		1		2	1			2	1	1	1	1	1		2	1		1		1	17

pressure vessel						1							1										2	
other pressure vessels								1						1								1	3	
chemical facilities				1				1	1							3		1					1	8
gas welding equipment																								
arc welding equipment																1								1
other welding equipment																								
kiln, caldron								1	2				1								1			5
industrial dryer						1				1	1			1								1		5
other kiln, caldron			1					1				2												4
transmission																	1							1
electric power facilities										1			1											2
other electrical equipment															1									1
human power cranes																				1			1	2
human power hauling equipment			1		1		2		4		3	2			1						2			16

human power																									
machine																									
hand tool			1		1		1		1	3			1		2	1		1				1			13
ladder			4		4		1	4	3	5	5	1	6	3		1	2	2	4	5	7	4	2	1	64
slinging tool			1		1		1		1																4
other tools			3		2		1	1	3	1	3	2	4		3	2	2	4	3	2	3	2	6	3	50
other equipment, facilities			7		5		3	5	3	4	3		5	3	2	1	4	3	2	4	1	1	2	4	62
scaffolding											1				1										2
timbering																									
stairs, landing stage			1		4		3	4		5	4	2	1	1	1	3		3	1	4	1		3	4	45
opening													1									1			2
roof, beam, haze, crossbeam, principal rafter							1			1							1	1							4
working platform, boot board			3		1			3	4	2	1	3	3	1	1			1	2	1	2	1		3	32
passage			3		4		6	7	3	9	1	2	4	1	2	5	2	3	4	8	4	2	7	4	81
building, establishment			6		1		1	2	1	4	2	1	5		2		5	1	2	1			1		35
other temporary buildings,					1			3	2					2				3	3	1	1				16

environment								1															1	2	
high/cold temperature environment							2						1						1	1			1	7	
other environments			1		1			1		1	1	1	3			1		2	1				1	2	16
other causal agent			1				1				1	1								1			15	1	21
no causal agent			2				3	2	1	3	3	3	1	3	1	3	1		2	3	2		5	2	40
unclassifiable			1																						1
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Workers age of fatal and non-fatal accidents in chemical fertilizer products in 1999-2022

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
19 years old or less	2	5		1	1	3	1				1			2	2	3		1	1	2				1	26
20-29	13	9	11	13	10	9	13	9	12	13	7	6	12	9	6	6	6	3	5	4	9	4	18	9	216
30-39	16	19	18	10	13	20	15	16	23	21	16	19	14	10	13	11	8	15	11	5	8	8	12	5	326
40-49	20	15	14	14	13	12	19	22	10	15	17	16	21	10	8	10	14	17	14	26	15	15	12	14	363
50-59	29	19	28	22	20	20	20	19	18	22	18	15	13	7	16	12	10	16	9	14	12	6	20	15	400
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	8	11	230
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Workers' number of workplace of fatal and non-fatal accidents in chemical fertilizer products in 1999-2022

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
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	8	6	282
10-29	32	30	28	26	21	28	21	28	19	24	18	13	31	17	21	21	14	27	12	14	17	13	14	14	503
30-49	13	13	17	11	12	9	10	14	15	14	15	14	12	5	8	8	9	14	12	4	8	7	22	7	273
50-99	12	4	8	6	9	10	12	11	15	13	9	15	11	4	9	7	4	9	16	14	8	6	8	15	235
100-299	12	11	12	10	6	8	7	4	12	10	8	8	2	8	5	3	11	8	3	10	7	7	16	10	198
300 workers or more	3	2	2	2	4	3	2	1	4	6	2	3	2	5	3	6	1	2		6	3	3	2	3	70
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Month of fatal and non-fatal accidents in chemical fertilizer products in 1999-2022

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
January	14	5	11	5	3	6	5	5	6	3	5	4	9	5	5	7	5	5	5	7	3		6	8	137
February	5	5	14	5	6	8	5	8	8	10	3	5	10	5	8	5	6	5	7	8	4	2	7	6	155
March	11	7	5	7	10	6	5	5	4	14	11	8	7	3	6	4	4	7	3	6	6	3	4	5	151
April	5	10	6	7	5	5	10	7	7	8	8	5	8	5	3	3	2	9	5	2	8	2	12	3	145
May	10	2	6	6	6	3	7	6	3	6	6	5	4	2	4	2	4	3	3	6	3	3	11	3	114
June	8	7	9	4	5	5	3	8	7	7	8	5	3	5	1	4	4	6	3	3	4	8	5	3	125

July	3	6	7	6	4	3	6	6	3	5	3	5	7	4	2	3	5	3	5	2		3	3	3	97
August	7	9	2	7	8	7	7	6	6	6	6	6	6	5	5	2	3	2		4	6	6	5	4	125
September	3	5	3	4	5	8	10	7	7	9	6	4	6	2	2	6	1	4	3	3	6	4	5	3	116
October	6	11	5	4	5	9	9	2	6	7	3	4	8	2	7	11	4	10	3	7	3	5	5	2	138
November	6	3	5	9	3	10	4	8	9	8	3	9	3	5	7	3	3	9	3	5	4	1	3	6	129
December	12	4	9	3	5	3	8	10	7	3	4	5	4	2	5	3	4	5	6	7	4	3	4	9	129
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Prefecture of fatal and non-fatal accidents in chemical fertilizer products in 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
Hokkaido	9	8	4				7	7	7	7	5	8	5	3	4	5	3	5	4	2	7	4	14	5	123
Aomori	2	1	1							1	1									1	1		2		10
Iwate	3	2	2		2		4	1	1	4		3	3	5		3		2	3	1	3	2		2	46
Miyagi	3	1					1		2		1	2	1		1		2	2	2	1	1	1	1	1	23
Akita			1		1		1		3	2	1				4	1	1		1	3	2		4	3	28
Yamagata	1	1			1		1		1			1									1		1	1	9
Fukushima	1	1	5		4			5	2		3	3			1		1	2	1	2				1	32
Ibaraki	6	2	4		2		3	1		2	1		3			1	4	2		3	2	1	2	2	41
Tochigi	1						2			2	1		4	2		2		2	1		1		1	2	21
Gunma	3	4	1				1	1	1		2		1		2			2	1	2		1	2	1	25

Shimane				1				1	1											1		1	1	6	
Okayama	2	2	2				1	2		4		2	2	2	1	1	1	5	3	1	1	3	2	2	39
Hiroshima	1	1	1		5		1	2		2	2	2	1	1			1	1	1		3			1	26
Yamaguchi	4	2	2		3		1		1	1	6	6	1	1	2			3	3				1	2	39
Tokushima	2	3	2					3	1	1		1	2	1	2	1		1	3	2	1	2	2		30
Kagawa	2	1	1		1		5	2	1		2		2	1	1										19
Ehime									1	2	2	2			1		2						1	1	12
Kochi	1		1					1		1			1	1	1	1									8
Fukuoka	1	1	3				3	4	6	4	6		8	3	6	4	2	2	4	4	2	4	2	6	75
Saga		3	1		2		2	1																1	10
Nagasaki			2		1			1						1									1		6
Kumamoto	3	1	1		1			2	1	2	1	2	3			2		3		1			2	1	26
Oita	6	4	2				1	1		1	2	1	1	1	1		1			3			3	1	29
Miyazaki		1	2				1		1	2										2	1	2	2	1	15
Kagoshima			1					1	2		1		1		1	2	2	1			2		1		15
Okinawa		1						1					1			2	1	1							7
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	55	1,561

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more.

Data of 2022 year do not include Covid-19 cases. Data of 2020 & 2021 year include Covid-19 cases. Fatal and non-fatal data are same situation.

Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

drown																								
contact to high/low-temperature																								
contact to harmful substance																					1			1
electric shock																1								1
explosion																								
burst																								
fire																								
traffic accident (public road)				1																				1
traffic accident (others)																								
reaction to motion/improper motion																								
others																								
unclassifiable					1																			1
total				2	2	1	1	1		1						1	1					2		12

Causal agents (large) of fatal accidents in chemical fertilizer products in 1999-2022

environment																								
high/cold temperature environment																								
other environments																								
other causal agent																								
no causal agent																								
unclassifiable					1																			1
total				2	2	1	1	1		1							1	1					2	12

Workers age of fatal accidents in chemical fertilizer products in 1999-2022

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
19 years old or less																									
20-29					1		1	1									1						1		5
30-39																									
40-49																									
50-59				1	1	1												1					1		5
60 years old or more				1						1															2
total				2	2	1	1	1		1							1	1					2		12

Workers' number of workplace of fatal accidents in chemical fertilizer products in 1999-2022

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
9 workers or less																									
10-29						1		1										1					1		4
30-49				2			1										1								4
50-99					1																		1		2
100-299					1					1															2
300 workers or more																									
total				2	2	1	1	1		1							1	1					2		12

Month of fatal accidents in chemical fertilizer products in 1999-2022

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
January								1																	1
February																									
March				1																					1
April				1	1																				2
May							1																		1
June																							1		1

Shimane																								
Okayama																								
Hiroshima																								
Yamaguchi																								
Tokushima																								
Kagawa																								
Ehime																								
Kochi																								
Fukuoka															1								1	
Saga																								
Nagasaki																								
Kumamoto																								
Oita																					1		1	
Miyazaki																								
Kagoshima																								
Okinawa																								
total				2	2	1	1	1		1						1	1					2		12

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

Return to https://www.jisha.or.jp/english/statistics/2022e_industry.html