

Fatal and non-fatal accidents in chemical fertilizer products in Japan in 1999-2021

chemical fertilizer products industry Code No.010809

Type of accidents in chemical fertilizer products in 1999-2021

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	total	Type of accidents
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	276	fall from height
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	192	falling to same level
crash	3	2	5	2	6		4	5	6	2	5	4	5		4	6	5	5	2	2	1	2	4	80	crash
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		70	struck by flying or falling object
collapse	2	2	4	2	1		1		3	1	1	2	1	1			2	1		1	1		1	27	collapse
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	crashed by
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	440	caught in/between
cut	6	4	3	2	4	5	4	2	8	5	2		7		2	2	2	1	1	1	1	2	1	65	cut
injury to the sole of the foot		1														1	1		1					4	injury to the sole of the foot
drown		1																						1	drown
contact to high/low-temperature	5		5	3	2	2	4	2	3	3	2	2	5		3	2	2	1	1	4	1		2	54	contact to high/low-temperature

engine			1		1													1					3	engine	
power transmission mechanism			1		2		2		1	3		1	2	1	4			2			2	1	2	24	power transmission mechanism
circular sawing machine					1		2	1	1				1											7	circular sawing machine
band sawing machine																									band sawing machine
wood planer machine								1																1	wood planer machine
hollow chisel mortiser, wood borer																									hollow chisel mortiser, wood borer
chamfering machine, router, woodworking milling machine																									chamfering machine, router, woodworking milling machine
chain saw																						1		1	chain saw
other woodworking machines					1						1													2	other woodworking machines
leveling, transporting or loading machine			2		2						2	1	1								1		1	11	leveling, transporting or loading machine
excavating machine															1									1	excavating machine
foundation work machine																									foundation work machine

machine				1		1	1															1	4	machine	
food manufacturing machine																								food manufacturing machine	
printing machine										1												2	3	printing machine	
industrial robot			1			1						1											3	industrial robot	
other general power machines			7		10		8	5	9	2	5	9	8	6	6	5	5	6	3	6	3	8	3	114	other general power machines
felling machine																								felling machine	
mobile logging machine																								mobile logging machine	
skyline yarding machine																								skyline yarding machine	
other mobile silviculture machine																								other mobile silviculture machine	
crane											1		1		1								3	crane	
mobile crane															1								1	mobile crane	
derrick crane																								derrick crane	
elevator, lift																								elevator, lift	
cargo lifting appliance																								cargo lifting appliance	
gondola																								gondola	
lumberyard equipment, logging cableway																								lumberyard equipment, logging cableway	

facilities			7		5		3	5	3	4	3		5	3	2	1	4	3	2	4	1	1	2	58	facilities	
scaffolding											1				1										2	scaffolding
timbering																										timbering
stairs, landing stage			1		4		3	4		5	4	2	1	1	1	3		3	1	4	1		3	41	stairs, landing stage	
opening														1								1			2	opening
roof, beam, haze, crossbeam, principal rafter							1				1						1	1							4	roof, beam, haze, crossbeam, principal rafter
working platform, boot board			3		1			3	4	2	1	3	3	1	1			1	2	1	2	1			29	working platform, boot board
passage			3		4		6	7	3	9	1	2	4	1	2	5	2	3	4	8	4	2	7	77	passage	
building, establishment			6		1		1	2	1	4	2	1	5		2		5	1	2	1			1	35	building, establishment	
other temporary buildings, establishments					1			3	2					2				3	3	1	1				16	other temporary buildings, establishments
explosive substance									1						2										3	explosive substance
inflammable substance																		1							1	inflammable substance
inflammable gas										1															1	inflammable gas
harmful substance			2		2		1	2	1	2						1	1	1					1	1	15	harmful substance
radiation																										radiation
other hazards, harmful substances			2							2			3	1		1	2	1	2		2		1	1	18	other hazards, harmful substances

metal material			2				2	3				3	2			2	1		3	1	2	2	1	24	metal material
lumber, bamboo							2																	2	lumber, bamboo
stone, sand, substance																									stone, sand, substance
other materials							2	1	2			1	2	2	1	1	1	1					1	15	other materials
load			7		5		5	6	7	10	4	7	6	4	5	6	6	6	4	6	2	2	1	99	load
machine/equipment as load																1						1	1	5	machine/equipment as load
natural ground, rock							1										1							2	natural ground, rock
standing tree																				1				1	standing tree
water																	1	1						2	water
abnormal environment																								1	abnormal environment
high/cold temperature environment							2						1				1			1	1		1	7	high/cold temperature environment
other environments			1		1			1		1	1	1	3			1		2	1				1	14	other environments
other causal agent			1				1				1	1							1				15	20	other causal agent
no causal agent			2				3	2	1	3	3	3	1	3	1	3	1		2	3	2		5	38	no causal agent
unclassifiable			1																					1	unclassifiable
total			82		65		79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	1,202	total

Workers age of fatal and non-fatal accidents in chemical fertilizer products in 1999-2021

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Age
19 years old or less	2	5		1	1	3	1				1			2	2	3		1	1	2				25	19 years old or less
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	207	20-29
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	321	30-39
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	349	40-49
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	385	50-59
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	219	60 years old or more
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	1,506	total

Workers' number of workplace of fatal and non-fatal accidents in chemical fertilizer products in 1999-2021

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	total	Workers scale
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	276	9 workers or less
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	489	10-29
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	266	30-49
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	220	50-99
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	188	100-299
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	67	300 workers or more
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	1,506	total

Month of fatal and non-fatal accidents in chemical fertilizer products in 1999-2021

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Month
January	14	5	11	5	3	6	5	5	6	3	5	4	9	5	5	7	5	5	5	7	3		6	129	January
February	5	5	14	5	6	8	5	8	8	10	3	5	10	5	8	5	6	5	7	8	4	2	7	149	February
March	11	7	5	7	10	6	5	5	4	14	11	8	7	3	6	4	4	7	3	6	6	3	4	146	March
April	5	10	6	7	5	5	10	7	7	8	8	5	8	5	3	3	2	9	5	2	8	2	12	142	April
May	10	2	6	6	6	3	7	6	3	6	6	5	4	2	4	2	4	3	3	6	3	3	11	111	May
June	8	7	9	4	5	5	3	8	7	7	8	5	3	5	1	4	4	6	3	3	4	8	5	122	June
July	3	6	7	6	4	3	6	6	3	5	3	5	7	4	2	3	5	3	5	2		3	3	94	July
August	7	9	2	7	8	7	7	6	6	6	6	6	6	5	5	2	3	2		4	6	6	5	121	August
September	3	5	3	4	5	8	10	7	7	9	6	4	6	2	2	6	1	4	3	3	6	4	5	113	September
October	6	11	5	4	5	9	9	2	6	7	3	4	8	2	7	11	4	10	3	7	3	5	5	136	October
November	6	3	5	9	3	10	4	8	9	8	3	9	3	5	7	3	3	9	3	5	4	1	3	123	November
December	12	4	9	3	5	3	8	10	7	3	4	5	4	2	5	3	4	5	6	7	4	3	4	120	December
total	90	74	82	67	65	73	79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	1,506	total

Prefecture of fatal and non-fatal accidents in chemical fertilizer products in 1999-2021

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Prefecture
Hokkaido	9	8	4				7	7	7	7	5	8	5	3	4	5	3	5	4	2	7	4	14	118	Hokkaido
Aomori	2	1	1							1	1									1	1		2	10	Aomori
Iwate	3	2	2		2		4	1	1	4		3	3	5		3		2	3	1	3	2		44	Iwate

Miyagi	3	1					1		2		1	2	1		1		2	2	2	1	1	1	1	22	Miyagi
Akita			1		1		1		3	2	1				4	1	1		1	3	2		4	25	Akita
Yamagata	1	1			1		1		1			1									1		1	8	Yamagata
Fukushima	1	1	5		4			5	2		3	3			1		1	2	1	2				31	Fukushima
Ibaraki	6	2	4		2		3	1		2	1		3			1	4	2		3	2	1	2	39	Ibaraki
Tochigi	1						2			2	1		4	2		2		2	1		1		1	19	Tochigi
Gunma	3	4	1				1	1	1		2		1		2			2	1	2		1	2	24	Gunma
Saitama	1	1			5		3	5	5	6	1		4	2	2	1	3	2	2	1	2		1	47	Saitama
Chiba	1		6		1		5	1	1	5		1	1	1	1	2	1	3		4		5		39	Chiba
Tokyo	1	1	3		1			1	1	1	2		2	3		1	2		4		3		1	27	Tokyo
Kanagawa	7	1	1		4		6	2	1	5	2	3	4	3	3	1		2	1			1	1	48	Kanagawa
Niigata	4		2					1	2	1		1	2	2		3	1	1		1		1	1	23	Niigata
Toyama	2	3			1		2	2	3	4	3	2	4	4		1		2			1	1		35	Toyama
Ishikawa	1	2							1						1			3		1				9	Ishikawa
Fukui								2									1							3	Fukui
Yamanashi	1				1		1		1	3	2	1			1		2					1	1	15	Yamanashi
Nagano		1	1				1			1		1					1							6	Nagano
Gifu	4	2	1		3		2	3	5	1		3	4			1	2					1		32	Gifu
Shizuoka	3	5	5		3		3	2	1	2	2				1	2		1	1	1	3	1	2	38	Shizuoka
Aichi	2	6	4		3		3	6	2	6	3	4	5	2	4	5	5	8		11	1	2	2	84	Aichi
Mie		3	7		1		6	1	4	2	1	5	2	1	2	3		3	1				3	45	Mie
Shiga		1			1		1		2		3	1	1	1	1		2		1			1		16	Shiga
Kyoto			1		5		2														1			9	Kyoto

Osaka	4	1	4		3		2	5	8	4	4	3	1		4	4	2	3	3	4	2	2	4	67	Osaka
Hyogo	6	6	6		6		5	9	4	5	4	3	5	4	5	4	6	1	5	8	7	3	9	111	Hyogo
Nara		1	1		2		1	1							3				1			1		11	Nara
Wakayama	2		1		1			1		1	1	4								1	2			14	Wakayama
Tottori							1				1													2	Tottori
Shimane					1				1	1											1		1	5	Shimane
Okayama	2	2	2				1	2		4		2	2	2	1	1	1	5	3	1	1	3	2	37	Okayama
Hiroshima	1	1	1		5		1	2		2	2	2	1	1			1	1	1		3			25	Hiroshima
Yamaguchi	4	2	2		3		1		1	1	6	6	1	1	2			3	3				1	37	Yamaguchi
Tokushima	2	3	2					3	1	1		1	2	1	2	1		1	3	2	1	2	2	30	Tokushima
Kagawa	2	1	1		1		5	2	1		2		2	1	1									19	Kagawa
Ehime									1	2	2	2			1		2						1	11	Ehime
Kochi	1		1					1		1			1	1	1	1								8	Kochi
Fukuoka	1	1	3				3	4	6	4	6		8	3	6	4	2	2	4	4	2	4	2	69	Fukuoka
Saga		3	1		2		2	1																9	Saga
Nagasaki			2		1			1						1									1	6	Nagasaki
Kumamoto	3	1	1		1			2	1	2	1	2	3			2		3		1			2	25	Kumamoto
Oita	6	4	2				1	1		1	2	1	1	1	1		1			3			3	28	Oita
Miyazaki		1	2				1		1	2									2	1	2	2	14	Miyazaki	
Kagoshima			1					1	2		1		1		1	2	2	1			2		1	15	Kagoshima
Okinawa		1						1					1			2	1	1						7	Okinawa
total	90	74	82		65		79	78	73	86	66	65	75	45	55	53	45	68	46	60	51	40	70	1,366	total

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

engine																							engine
power transmission mechanism																							power transmission mechanism
woodworking machine																							woodworking machine
construction machine																							construction machine
metal manufacturing machine																							metal manufacturing machine
general machine						1									1							2	general machine
mobile silviculture machine																							mobile silviculture machine
crane																				1	1		crane
conveying machine				1	1	1	1															4	conveying machine
vehicle				1																		1	vehicle
pressure vessel																							pressure vessel
chemical facilities																							chemical facilities
welding equipment																1						1	welding equipment

kiln, caldron																							kiln, caldron
electric equipment																							electric equipment
human power machine, tools																							human power machine, tools
tools																							tools
other equipments, facilities																							other equipments, facilities
temporary buildings, establishments																							temporary buildings, establishments
hazards, harmful substances																					1	1	hazards, harmful substances
materials																							materials
load										1												1	load
natural environment																							natural environment
other causal agent																							other causal agent
no causal agent																							no causal agent
unclassifiable					1																	1	unclassifiable

total				2	2	1	1	1		1							1	1					2	12	total
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Causal agents (small) of fatal accidents in chemical fertilizer products in 1999-2021

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	2021	total	Causal (S) agents
engine																									engine
power transmission mechanism																									power transmission mechanism
circular sawing machine																									circular sawing machine
band sawing machine																									band sawing machine
wood planer machine																									wood planer machine
hollow chisel mortiser, wood borer																									hollow chisel mortiser, wood borer
chamfering machine, router, woodworking milling machine																									chamfering machine, router, woodworking milling machine
chain saw																									chain saw
other woodworking machines																									other woodworking machines

no causal agent																									no causal agent	
unclassifiable					1																				1	unclassifiable
total				2	2	1	1	1		1							1	1						2	12	total

Workers age of fatal accidents in chemical fertilizer products in 1999-2021

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Age	
19 years old or less																										19 years old or less
20-29					1		1	1									1							1	5	20-29
30-39																										30-39
40-49																										40-49
50-59				1	1	1												1						1	5	50-59
60 years old or more				1						1															2	60 years old or more
total				2	2	1	1	1		1							1	1						2	12	total

Workers' number of workplace of fatal accidents in chemical fertilizer products in 1999-2021

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	total	Workers scale	
9 workers or less																										9 workers or less
10-29						1		1										1						1	4	10-29
30-49				2			1										1								4	30-49
50-99					1																			1	2	50-99

100-299					1					1															2	100-299	
300 workers or more																											300 workers or more
total				2	2	1	1	1		1							1	1						2	12	total	

Month of fatal accidents in chemical fertilizer products in 1999-2021

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Month	
January								1																1	January	
February																										February
March				1																				1	March	
April				1	1																			2	April	
May							1																	1	May	
June																							1	1	June	
July																		1						1	July	
August																							1	1	August	
September					1					1														2	September	
October						1																		1	October	
November																	1							1	November	
December																										December
total				2	2	1	1	1		1							1	1					2	12	total	

Prefecture of fatal accidents in chemical fertilizer products in 1999-2021

Miyazaki																									Miyazaki
Kagoshima																									Kagoshima
Okinawa																									Okinawa
total				2	2	1	1	1		1						1	1						2	12	total

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

Return to https://www.jisha.or.jp/english/statistics/2021e_industry.html