Fatal and non-fatal accidents in chemical fiber in Japan in 1999-2021

chemical fiber industry Code No.010802

Type of accidents in chemical fiber 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	3	6	5	3	6	1	5	4	5	2	1	6	2	4	4	3	1	4	3	3	2	2	1	76	fall from height
falling to same level	8	9	6	4	6	6	5	6	5	6	3	4	3	4	5	5	1	5	6	4	8	1	8	118	falling to same level
crash		2	1			3	1	1	1	4	1		1	1	2	1	1	1	2		2	1	1	27	crash
struck by flying or falling object	2	4	1	3		2	1	4		2			2	2	1	2	2		1	1	1			31	struck by flying or falling object
collapse		2		2		1			1					1									1	8	collapse
crashed by	2		2	2	1		1		1	1		1	1	1	1	1	5		1	1			2	24	crashed by
caught in/between	25	27	21	23	13	18	14	10	20	15	9	8	9	12	16	13	11	14	15	10	11	11	8	333	caught in/between
cut	3	1	8	7	3	2	5	1	5	2	1	3		3	2		1	1	2	2	1		5	58	cut
injury to the sole of the foot					1	1																		2	injury to the sole of the foot
drown			1																					1	drown
contact to high/low-temperature	3	6	2	3	2	1	1	1	1	2	1	1	1	1	1	1	1	1	3	2	3		2	40	contact to high/low-temperature

contact to harmful substance				1		2	1		1					3		2	2	1	1					14	contact to harmful substance
electric shock																									electric shock
explosion				2																1		1		4	explosion
burst			1																					1	burst
fire				2								1												3	fire
traffic accident (public road)														1										1	traffic accident (public road)
traffic accident (others)						1																		1	traffic accident (others)
reaction to motion/improper motion	4	7	2	3	3	3	5	3	3	3		4	3	3	7	1	3	1	5	4	3	2	2	74	reaction to motion/improper motion
others			1							1											1		2	5	others
unclassifiable			1																					1	unclassifiable
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Causal agents (large) of fatal and non-fatal accidents in chemical fiber in 1999-2021

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	total	Causal (L) agents
machine	21	28	25	22	11	16	17	9	21	14	8	12	10	8	15	11	13	11	14	8	12	10	11	327	machine
crane, conveying																									crane,

machine	8	8	4	3	3	7	3	1	4	7	2		4	5	3	3	4	5	4	2	1		3	84	conveying machine
other equipment	5	7	9	13	13	5	6	7	5	6	3	5	4	6	5	3	4	3	6	6	3	3	6	133	other equipment
temporary buildings, establishments	8	9	9	6	3	7	4	6	7	6	1	4	1	7	8	6	1	4	7	5	8	2	7	126	temporary buildings, establishments
substance, material	4	3		6	2	3	4	4	1	2	2	3	1	3		3	4	3	1	1	3	1	1	55	substance, material
load	2	4	2	5		1	3	2	4	2		2	2	4	5	1	1	2	2	3			1	48	load
environment		1			1	1						2			1	2			4		1			13	environment
others	2	4	3		2	1	2	1	1	1				3	2		1		1	3	4	2	3	36	others
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Causal agents (middle) of fatal and non-fatal accidents in chemical fiber in 1999-2021

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	total	Causal (M) agents
engine						1																	1	2	engine
power transmission mechanism		2	2	1		1	1		1	2					1	1		1	3	1			1	18	power transmission mechanism
woodworking machine			1																				1	2	woodworking machine

construction machine												1							1					2	construction machine
metal manufacturing machine	1	3	1			1		1	1						1	1								10	metal manufacturing machine
general machine	20	23	21	21	11	13	16	8	19	12	8	11	10	8	13	9	13	10	10	7	12	10	8	293	general machine
mobile silviculture machine																									mobile silviculture machine
crane	2	1													1						1			5	crane
conveying machine	6	5	4	3	2	6	3	1	4	7	2		1	4	2	3	4	5	3	2			2	69	conveying machine
vehicle		2			1	1							3	1					1				1	10	vehicle
pressure vessel				1							1									1				3	pressure vessel
chemical facilities	2	1		1		1																1		6	chemical facilities
welding equipment																									welding equipment
kiln, caldron				1								1			1									3	kiln, caldron
electric equipment																				2				2	electric equipment
human power machine, tools	1	4	6	4	6	2	1	2	1	2	1	1	1	4	2	1	2		2	3	2	1	5	54	human power machine, tools

tools	2	2		3	5	1	3	4	4	2	1	2	2	1	2	1		3	3			1	1	43	tools
other equipments, facilities			3	3	2	1	2	1		2		1	1	1		1	2		1		1			22	other equipments, facilities
temporary buildings, establishments	8	9	9	6	3	7	4	6	7	6	1	4	1	7	8	6	1	4	7	5	8	2	7	126	temporary buildings, establishments
hazards, harmful substances	2	1		3	1	2	2		1	1		1	1	3		2	3	1	1	1	1		1	28	hazards, harmful substances
materials	2	2		3	1	1	2	4		1	2	2				1	1	2			2	1		27	materials
load	2	4	2	5		1	3	2	4	2		2	2	4	5	1	1	2	2	3			1	48	load
natural environment		1			1	1						2			1	2			4		1			13	natural environment
other causal agent	1	1						1	1					1						1	2		2	10	other causal agent
no causal agent	1	3	1		2	1	2			1				2	2		1		1	1	2	2	1	23	no causal agent
unclassifiable			2																	1				3	unclassifiable
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Causal agents (small) of fatal and non-fatal accidents in chemical fiber 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																							1	1	engine
power transmission mechanism			2				1		1	2					1	1		1	3	1			1	14	power transmission mechanism
circular sawing machine			1																				1	2	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
leveling, transporting or loading machine																									leveling, transporting or loading machine
excavating machine																									excavating machine
foundation work machine																									foundation work machine

hardening machine																									hardening machine
demolition machine																			1					1	demolition machine
vehicle for high lift work												1												1	vehicle for high lift work
other construction machines																									other construction machines
lathe															1									1	lathe
drill press, milling machine																									drill press, milling machine
grinding machine, buffing machine																1								1	grinding machine, buffing machine
power press			1					1	1															3	power press
forging pressure hammer																									forging pressure hammer
shearing machine																									shearing machine
other metal manufacturing machines																									other metal manufacturing machines
centrifugal machine									1	1														2	centrifugal machine
mixer, grinder			1				1		2				1					1						6	mixer, grinder
roll machine (except printingroll machine)			9		4			4	8	3	5	2	3	2	6	3	3	3	3	1	3	6	4	72	roll machine (except printingroll machine)
injection molding																									injection molding

machine																									machine
food manufacturing machine																									food manufacturing machine
printing machine			1		2		2																1	6	printing machine
industrial robot																							1	1	industrial robot
other general power machines			10		5		13	4	8	8	3	9	6	6	7	6	10	6	7	6	9	4	2	129	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			2	crane
mobile crane																									mobile crane
derrick crane																									derrick crane
elevator, lift																									elevator, lift
cargo lifting appliance																									cargo lifting appliance
gondola																									gondola
lumberyard equipment, logging																									lumberyard equipment, logging

cableway																									cableway
simple skyline yarding equipment																									simple skyline yarding equipment
other powered crane																									other powered crane
truck			2						1	1								2	1	1				8	truck
forklift					1		2	1		4	1		1	1	1	2	3	2	2				1	22	forklift
railway equipment																									railway equipment
conveyor			1		1		1		1	1	1			3	1	1	1			1			1	14	conveyor
loader																									loader
straddle carrier																									straddle carrier
rough terrain hauler																									rough terrain hauler
other powered conveying machines			1						2	1								1						5	other powered conveying machines
cars, bus, motorcycle					1								3	1										5	cars, bus, motorcycle
railway vehicle																									railway vehicle
other vehicles																			1				1	2	other vehicles
boiler																									boiler
pressure vessel											1													1	pressure vessel
other pressure vessels																				1				1	other pressure vessels
chemical facilities																						1		1	chemical facilities

gas welding equipment																									gas welding equipment
arc welding equipment																									arc welding equipment
other welding equipment																									other welding equipment
kiln, caldron																									kiln, caldron
industrial dryer												1			1									2	industrial dryer
other kiln, caldron																									other kiln, caldron
transmission																									transmission
electric power facilities																				2				2	electric power facilities
other electrical equipment																									other electrical equipment
human power cranes																	1							1	human power cranes
human power hauling equipment			1		3		1	1				1		3	1	1			1	2	1			16	human power hauling equipment
human power machine									1															1	human power machine
hand tool			5		3			1		2	1		1	1	1		1		1	1	1	1	5	25	hand tool
ladder					4		2	2	2		1	2		1	1			2	1			1	1	20	ladder
slinging tool								2																2	slinging tool
other tools					1		1		2	2			2		1	1		1	2					13	other tools

other equipment, facilities			3		2		2	1		2		1	1	1		1	2		1		1			18	other equipment, facilities
scaffolding					1							1				1								3	scaffolding
timbering																									timbering
stairs, landing stage			1				1	1	2	2			1		2	1	1	1		1	1	1		16	stairs, landing stage
opening																									opening
roof, beam, haze, crossbeam, principal rafter								1																1	roof, beam, haze, crossbeam, principal rafter
working platform, boot board			1					1	2	1	1			1	2			1	2		1		2	15	working platform, boot board
passage			2				2	1	3	2		3		3	1	3		2	4	3	5		5	39	passage
building, establishment			4		1			2		1				3	1	1					1			14	building, establishment
other temporary buildings, establishments			1		1		1								2				1	1		1		8	other temporary buildings, establishments
explosive substance																									explosive substance
inflammable substance																				1				1	inflammable substance
inflammable gas																							1	1	inflammable gas
harmful substance							1		1					3			2	1			1			9	harmful substance
radiation																									radiation
other hazards,																									other hazards,

harmful substances					1		1			1		1	1			2	1		1					9	harmful substances
metal material					1		1	3			1										1	1		8	metal material
lumber, bamboo							1											1						2	lumber, bamboo
stone, sand, substance																									stone, sand, substance
other materials								1		1	1	2				1	1	1			1			9	other materials
load			2				2	2	4	2		2	2	4	5	1	1	2	2	3			1	35	load
machine/equipment as load							1																	1	machine/equipment as load
natural ground, rock																									natural ground, rock
standing tree															1									1	standing tree
water																									water
abnormal environment																									abnormal environment
high/cold temperature environment																1			2		1			4	high/cold temperature environment
other environments					1							2				1			2					6	other environments
other causal agent								1	1					1						1	2		2	8	other causal agent
no causal agent			1		2		2			1				2	2		1		1	1	2	2	1	18	no causal agent
unclassifiable			2																	1				3	unclassifiable
total			52		35		39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	612	total

Workers age of fatal and non-fatal accidents in chemical fiber 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		2	2		1	1	3	1	1	1	2	1						1		1		19	19 years old or less
20-29	11	12	9	12	4	11	10	6	7	5	2	4	5	6	4	6	6	5	9	4	4	4	9	155	20-29
30-39	7	14	7	10	11	5	8	4	11	8	6	5	4	11	10	6	6	7	6	6	9	3	6	170	30-39
40-49	12	10	12	11	5	5	5	5	12	3	2	6	3	9	7	6	10	10	8	9	13	4	3	170	40-49
50-59	16	23	20	15	12	16	12	9	7	12	5	9	5	3	12	6	3	5	11	5	4	5	9	224	50-59
60 years old or more	4	3	4	5	1	4	3	5	3	9		3	3	6	6	5	3	1	5	3	2	1	5	84	60 years old or more
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Workers' number of workplace of fatal and non-fatal accidents in chemical fiber 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	5	6	5	9	4	3	4	5	4	2		1		4	1		3		1	2	1	1	1	62	9 workers or less
10-29	9	10	9	10	9	6	10	8	6	4		5	4	13	7	5	8	4	7	8	1	1	10	154	10-29
30-49	5	9	7	9	2	4	5	2	8	3	2	3	3	2	4	3	3	3	3		3		2	85	30-49
50-99	6	12	5	5	4	8	1	2	4	5	3	7	5	2	4		3	5	5	1	3	2	3	95	50-99
100-299	11	12	10	15	6	8	7	6	11	15	5	7	6	8	7	15	3	9	11	7	14	10	10	213	100-299
300 workers or more	14	15	16	7	10	12	12	7	10	9	6	5	4	7	16	6	8	7	12	10	10	4	6	213	300 workers or more
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Month of fatal and non-fatal accidents in chemical fiber 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	6	4	4	9	4	4	1	3	2	2	3	5	2	6	2	4	4	3	3	2		3	2	78	January
February	3	4	4	3	3	3	4	2	3	2	2		1	5	6	2	5	3	5	4	8	1	5	78	February
March	4	4	6	4		4	3	2	5	4			3	4	3	1	1	2	5	4	5	4	2	70	March
April	4	8	3	6	2	6	5	1	2	5	1	2	5	4	1	4	1	2		1	3	1	6	73	April
May	3	6	6	3	1	6	1	3	4	2	1	3	2	5	2	1	3	2	2			1	4	61	May
June	4	3	3	3	4	1	2	1	4	2	4	5	1		6	2	1	1	5	3	1	3	3	62	June
July	3	7	5	3	5	5	7	1	6	3		1		4	3	4	4		3	3	4	2	2	75	July
August	2	2	4	4	5	2	2	2	4	4	1	2	1	1	3	3	2	3	4	2	3			56	August
September	8	6	4	6	4	4	2	3	1	4		5		3	3	1	3	3	1	2	1		1	65	September
October	5	7	6	10	2	2	5	1	3	4	1	3	2	1	5	3	2	2	1	6	3	1	2	77	October
November	5	4	4	2	3	3	4	8	5	2	1	1		2	5	3	1	5	5	1	2	2	1	69	November
December	3	9	3	2	2	1	3	3	4	4	2	1	5	1		1	1	2	5		2		4	58	December
total	50	64	52	55	35	41	39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	822	total

Prefecture of fatal and non-fatal accidents in chemical fiber 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										1					1	1							2	5	Hokkaido
Aomori		2																					1	3	Aomori

Iwate	1																							1	Iwate
Miyagi																									Miyagi
Akita																									Akita
Yamagata								1														1		2	Yamagata
Fukushima							1		2			1			1	1			2	2				10	Fukushima
Ibaraki		1						1		1		1			1				1					6	Ibaraki
Tochigi	1	2	3		2		1			2		4				2	2	1	1	1			1	23	Tochigi
Gunma		2	1				4		2					1	2					1				13	Gunma
Saitama		3	1																		1			5	Saitama
Chiba	1		1							1			1	1				2						7	Chiba
Tokyo	3	2																						5	Tokyo
Kanagawa	1	3					3	1																8	Kanagawa
Niigata																		1						1	Niigata
Toyama	1	2	1		3		3		7	3		2	2	2	2	1	1	3	1				1	35	Toyama
Ishikawa			1													1		1	2	1		1	1	8	Ishikawa
Fukui		2	3				1	4	1	3	1	3	3	1	1	4	2	2	4	4	1		2	42	Fukui
Yamanashi			1																					1	Yamanashi
Nagano							1																	1	Nagano
Gifu	1	2	3				4	3	5	2	1	3		4	7	2	5	1	5	3	3	2	4	60	Gifu
Shizuoka	1	2	2					1	2	2		1	1	1		1	1	1	2	2			1	21	Shizuoka
Aichi	6	6	4		7		2	3	2	2	3	1	2	5	3		1	2	1		5	2	1	58	Aichi
Mie	1	2	1		3						1										1			9	Mie
Shiga		3	4		1		1	1	3	5			2	2	4	3		2	2		3		1	37	Shiga

Kyoto	2	3	1					1	1			1	1	1	2		3	1		3		1	2	23	Kyoto
Osaka	4	4	1		3		3	1	2	1			3	3	1	2	3	1	4	3	1	1	6	47	Osaka
Hyogo	3	3	1		2		1		1	2		3		2	1	2	2	1	1	1	6	3		35	Hyogo
Nara										1													1	2	Nara
Wakayama			1		2			2	1										1					7	Wakayama
Tottori																									Tottori
Shimane	1		1							1			1		2			1	2	2	1	1	3	16	Shimane
Okayama	5	4	3		2		5	2	4	3	2	2	2	4	5	3	2	2	5	1	4	2	1	63	Okayama
Hiroshima	4	1	3		1		2	1		2	3	1	1	2		1	1	4		1				28	Hiroshima
Yamaguchi	4	3	6		5		1		3	2		2			1	2			1		2	1	2	35	Yamaguchi
Tokushima		3						1	1					1	2		2	1					1	12	Tokushima
Kagawa		1									1													2	Kagawa
Ehime	6	4	4		3		5	3	3	3	2	3	2	3	3	3	3	1	4	3	4	2	1	65	Ehime
Kochi														1										1	Kochi
Fukuoka	2	1	4					1	3		1		1	1										14	Fukuoka
Saga		1																						1	Saga
Nagasaki																									Nagasaki
Kumamoto																									Kumamoto
Oita																									Oita
Miyazaki	2	2	1		1		1	3		1	1			1								1		14	Miyazaki
Kagoshima																									Kagoshima
Okinawa																									Okinawa

total	50	64	52		35		39	30	43	38	16	28	22	36	39	29	28	28	39	28	32	18	32	726	total

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more. Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

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

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Fatal accidents in chemical fiber in Japan in 1999-2021

chemical fiber industry Code No.010802

Type of fatal accidents in chemical fiber 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																									fall from height
falling to same level																									falling to same level
crash																									crash
struck by flying or falling object																									struck by flying or falling object
collapse		1		1																				2	collapse
crashed by																									crashed by
																									caught

caught in/between	1	1			2					1								1		1				7	in/between
cut																									cut
injury to the sole of the foot																									injury to the sole of the foot
drown			1																					1	drown
contact to high/low-temperature																									contact to high/low-temperature
contact to harmful substance																									contact to harmful substance
electric shock																									electric shock
explosion																						1		1	explosion
burst																									burst
fire																									fire
traffic accident (public road)																									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	1	2	2	1	2					1								1		1		1		12	total

Causal agents (large) of fatal accidents in chemical fiber in 1999-2021

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	total	Causal (L) agents
machine	1	1			1					1								1						5	machine
crane, conveying machine		1			1															1				3	crane, conveying machine
other equipment																						1		1	other equipment
temporary buildings, establishments			1																					1	temporary buildings, establishments
substance, material																									substance, material
load				1																				1	load
environment																									environment
others			1																					1	others
total	1	2	2	1	2					1								1		1		1		12	total

Causal agents (middle) of fatal accidents in chemical fiber in 1999-2021

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	total	Causal (M) agents
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			1					1								1						5	general machine
mobile silviculture machine																									mobile silviculture machine
crane																									crane
conveying machine		1			1															1				3	conveying machine
vehicle																									vehicle
pressure vessel																									pressure vessel
chemical facilities																						1		1	chemical

																									facilities
welding equipment																									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			1																					1	temporary buildings, establishments
hazards, harmful substances																									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	1	2	2	1	2					1								1		1		1		12	total

Causal agents (small) of fatal accidents in chemical fiber 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
leveling, transporting or loading machine																									leveling, transporting or loading machine
excavating machine																									excavating machine
foundation work machine																									foundation work machine
hardening machine																									hardening machine
demolition machine																									demolition machine
vehicle for high lift work																									vehicle for high lift work
other construction machines																									other construction machines
lathe																									lathe
drill press, milling machine																									drill press, milling machine
grinding machine, buffing machine																									grinding machine, buffing machine
power press																									power press
forging pressure hammer																									forging pressure hammer
shearing machine																									shearing machine

other metal manufacturing machines																									other metal manufacturing machines
centrifugal machine																									centrifugal machine
mixer, grinder																									mixer, grinder
roll machine (except printingroll machine)		1			1																			2	roll machine (except printingroll machine)
injection molding machine																									injection molding machine
food manufacturing machine																									food manufacturing machine
printing machine																									printing machine
industrial robot																									industrial robot
other general power machines	1									1								1						3	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																									crane

mobile crane																									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
simple skyline yarding equipment																									simple skyline yarding equipment
other powered crane																									other powered crane
truck																									truck
forklift		1																						1	forklift
railway equipment																									railway equipment
conveyor					1															1				2	conveyor
loader																									loader
straddle carrier																									straddle carrier
rough terrain hauler																									rough terrain hauler
other powered conveying machines																									other powered conveying machines
cars, bus, motorcycle																									cars, bus, motorcycle

railway vehicle																									railway vehicle
other vehicles																									other vehicles
boiler																									boiler
pressure vessel																									pressure vessel
other pressure vessels																									other pressure vessels
chemical facilities																						1		1	chemical facilities
gas welding equipment																									gas welding equipment
arc welding equipment																									arc welding equipment
other welding equipment																									other welding equipment
kiln, caldron																									kiln, caldron
industrial dryer																									industrial dryer
other kiln, caldron																									other kiln, caldron
transmission																									transmission
electric power facilities																									electric power facilities
other electrical equipment																									other electrical equipment
human power cranes																									human power cranes

human power hauling equipment																									human power hauling equipment
human power machine																									human power machine
hand tool																									hand tool
ladder																									ladder
slinging tool																									slinging tool
other tools																									other tools
other equipment, facilities																									other equipment, facilities
scaffolding																									scaffolding
timbering																									timbering
stairs, landing stage																									stairs, landing stage
opening																									opening
roof, beam, haze, crossbeam, principal rafter																									roof, beam, haze, crossbeam, principal rafter
working platform, boot board																									working platform, boot board
passage																									passage
building, establishment			1																					1	building, establishment
other temporary buildings,																									other temporary buildings,

establishments																									establishments
explosive substance																									explosive substance
inflammable substance																									inflammable substance
inflammable gas																									inflammable gas
harmful substance																									harmful substance
radiation																									radiation
other hazards, harmful substances																									other hazards, harmful substances
metal material																									metal material
lumber, bamboo																									lumber, bamboo
stone, sand, substance																									stone, sand, substance
other materials																									other materials
load				1																				1	load
machine/equipment as load																									machine/equipment as load
natural ground, rock																									natural ground, rock
standing tree																									standing tree
water																									water
abnormal environment																									abnormal environment
high/cold																									high/cold

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

Workers age of fatal accidents in chemical fiber 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						2	20-29
30-39		1			2																			3	30-39
40-49		1																		1				2	40-49
50-59	1			1						1												1		4	50-59
60 years old or more			1																					1	60 years old or more
total	1	2	2	1	2					1								1		1		1		12	total

Workers' number of workplace of fatal accidents in chemical fiber 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	10-29
30-49																									30-49
50-99	1			1																1				3	50-99
100-299		2	1		1													1				1		6	100-299
300 workers or more			1		1																			2	300 workers or more
total	1	2	2	1	2					1								1		1		1		12	total

Month of fatal accidents in chemical fiber 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															1				3	January
February		1																						1	February
March			1																					1	March
April																									April
May																		1						1	May
June																									June
July		1																						1	July
August																									August
September	1																							1	September
October					1																	1		2	October
November				1						1														2	November

December																									December
total	1	2	2	1	2					1								1		1		1		12	total

Prefecture of fatal accidents in chemical fiber 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																									Hokkaido
Aomori																									Aomori
Iwate																									Iwate
Miyagi																									Miyagi
Akita																									Akita
Yamagata																									Yamagata
Fukushima																									Fukushima
Ibaraki																									Ibaraki
Tochigi																									Tochigi
Gunma																									Gunma
Saitama																									Saitama
Chiba																									Chiba
Tokyo																									Tokyo
Kanagawa																									Kanagawa
Niigata																									Niigata
Toyama		1																1						2	Toyama
Ishikawa																									Ishikawa

Fukui																									Fukui
Yamanashi																									Yamanashi
Nagano																									Nagano
Gifu			1							1														2	Gifu
Shizuoka																									Shizuoka
Aichi			1																					1	Aichi
Mie																									Mie
Shiga					1																			1	Shiga
Kyoto																									Kyoto
Osaka																									Osaka
Hyogo																						1		1	Hyogo
Nara																									Nara
Wakayama																									Wakayama
Tottori																									Tottori
Shimane																									Shimane
Okayama	1																							1	Okayama
Hiroshima																									Hiroshima
Yamaguchi		1		1	1																			3	Yamaguchi
Tokushima																									Tokushima
Kagawa																									Kagawa
Ehime																				1				1	Ehime
Kochi																									Kochi
Fukuoka																									Fukuoka

Saga																									Saga
Nagasaki																									Nagasaki
Kumamoto																									Kumamoto
Oita																									Oita
Miyazaki																									Miyazaki
Kagoshima																									Kagoshima
Okinawa																									Okinawa
total	1	2	2	1	2					1								1		1		1		12	total

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

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