

Fatal and non-fatal accidents in glass products in Japan in 1999-2022

glass products industry Code No.010902

Type of accidents in glass 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	16	21	11	15	18	23	18	13	11	14	15	12	12	11	11	16	18	11	13	10	12	14	7	10	332
falling to same level	21	16	18	16	15	24	20	18	20	21	9	14	15	21	15	10	16	14	29	20	10	16	22	16	416
crash	6	11	15	6	6	6	6	3	8	2	7	9	6	4	9	4	7	3	3	5	5	3	6	6	146
struck by flying or falling object	14	9	10	12	10	12	8	15	12	12	9	8	4	10	11	10	4	7	6	7	8	5	6	4	213
collapse	8	11	7	6	12	9	9	15	6	9	5	4	8	5	9	6	4	5	5	6	5	2	7	3	166
crashed by	3	2	7	9	12	11	8	12	8	3	6	2	5	7	3	3	3	3	2	6	5	4	4	4	132
caught in/between	62	62	50	36	49	53	30	37	39	28	24	24	35	22	30	20	24	22	21	23	22	17	20	19	769
cut	29	35	25	19	24	24	25	15	18	25	10	16	17	12	8	9	9	12	7	8	6	12	12	14	391
injury to the sole of the foot									1				3	2											6
drown																									
contact to high/low-	7	2	7	4	10	5	10	1	3	5	4	3	3	6	5	3	4	1	3	1	3	6	3	3	102

temperature																									
contact to harmful substance		1	2	4	5	1		1	2	1	1	2	2			2	3	1	1	1	1			1	32
electric shock						1		1				1													3
explosion						1						1											1		3
burst					1									1					1						3
fire		1	4				1									1		1							8
traffic accident (public road)			2	3	1	2		2	1	5		3			2	3	8	1	2	2	7	1		2	47
traffic accident (others)		1																	1						2
reaction to motion/improper motion	15	11	13	18	19	10	15	18	20	11	11	12	14	17	14	13	7	16	13	11	17	17	23	20	355
others				1					2		1		1						1		1		1	1	9
unclassifiable	1			2							1												1		5
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Causal agents (large) of fatal and non-fatal accidents in glass 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	58	45	37	30	39	40	26	30	29	32	18	19	24	25	32	20	26	21	18	15	12	13	16	16	641

crane, conveying machine	29	27	26	23	25	31	18	21	17	17	13	18	18	5	17	12	16	15	12	17	26	7	15	11	436
other equipment	9	35	18	18	37	28	29	30	31	17	22	21	29	26	23	23	21	17	25	22	19	30	13	24	567
temporary buildings, establishments	27	23	30	23	22	28	23	19	20	22	18	19	15	17	12	17	20	14	24	17	13	18	22	14	477
substance, material	43	33	44	35	41	40	37	37	30	33	19	21	32	25	18	18	17	13	16	17	17	16	23	20	645
load	5	11	8	11	11	8	11	10	14	7	4	10	4	6	8	3	2	5	3	3	4	4	10	5	167
environment			3	5	2	1	2		1	3	1		2	5	1	3	1	2	3	4	2	2	1	3	47
others	11	9	5	6	5	6	4	4	9	5	8	2	2	8	7	3	5	9	8	5	9	7	13	10	160
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Causal agents (middle) of fatal and non-fatal accidents in glass 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	4	3	4		2	2	1	1	2	1	3	1	3	3	4	1	2	1	1	1	1	2	1	1	45
woodworking machine	1	4	2									1				2				1			2		13

demolition machine																									
vehicle for high lift work																									
other construction machines			1																						1
lathe									1		1	1	1				1	1	1	1					8
drill press, milling machine									1	1		1										1			4
grinding machine, buffing machine			1		4		2	1			1			1			1				1				12
power press			1		1		1		2	1						3									9
forging pressure hammer																									
shearing machine							1	1			1	1													4
other metal manufacturing machines							2	2	2	3	2			1	1					1	1		2		17
centrifugal machine					1																				1
mixer, grinder			2		1		2	1				1		1	1	1		1	1			1	1		14
roll machine (except printingroll machine)					4		1	3	5	5	1	3	2	1	4	2	1	3	1						36

pressure vessel								1															1		
other pressure vessels																									
chemical facilities																									
gas welding equipment							1							1					1		1		4		
arc welding equipment																				1			1		
other welding equipment																									
kiln, caldron			2		3		3	1	1	1	1	2	1	1	1		6	1	1	1	1		1	28	
industrial dryer											1												1		
other kiln, caldron																				1			1		
transmission							1												1			1	3		
electric power facilities					1									1									2		
other electrical equipment												1	1						1				3		
human power cranes					2															1			2	5	
human power hauling equipment			2		7		6	10	8	3	3	7	3	7	7	4	3	6	8	5	3	11	5	5	113

human power																									
machine																									
hand tool			1		4		2	4	3	2	2	1	7		4	3	1	4		4	1	2	1	2	48
ladder			3		5		5	6	6	4	2	3	3	6	3	7	5	3	5	4	4	8	1	4	87
slinging tool								1				1			1							1			4
other tools			5		10		6	5	6	3	9	3	10	10	5	4	4	1	7	4	7	4	2	8	113
other equipment, facilities			5		5		5	3	5	4	5	3	4	1	1	4	2	2	4	2	1	2	3	1	62
scaffolding			1		4				1	1							1						1		9
timbering																									
stairs, landing stage			5		4		5	6	3	5	3	10	6	4	2	4	3	3	6	1	6	5	3	3	87
opening			1				1			1				1				1				1		1	7
roof, beam, haze, crossbeam, principal rafter														1			1			1			1		4
working platform, boot board			4		2		6	3	2	1	2	2	1	4	2		1	1	5	2	1	4	4	3	50
passage			15		6		5	6	9	9	10	5	6	5	4	5	12	5	8	10	5	6	12	7	150
building, establishment			2		4		2	2	3	4	1	1	1		2	5	1	3	3	1	1	1	1		38
other temporary buildings,			2		2		4	2	2	1	2	1	1	2	2	3	1	2	1	2			1		31

environment																								1	1
high/cold temperature environment			2	1		2			2			1	1		1	1	1	1		1	2			1	17
other environments			1						1	1			1	4	1	2		1	2	3			1	1	19
other causal agent			2						5	2	1			1		1	1		2	3	1		3	1	23
no causal agent			3	5		4	4	4	4	3	7	2	2	7	7	2	3	9	5	2	8	7	10	9	103
unclassifiable																1		1						2	
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Workers age of fatal and non-fatal accidents in glass 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	6	4	5	6	4	6	4	4	4	2	2	1	1	4	3		3	1	1		3		1	4	69
20-29	44	46	41	32	52	35	27	39	23	26	12	22	26	20	23	5	14	14	21	10	13	13	13	12	583
30-39	34	45	36	38	46	53	35	39	38	37	33	24	27	26	27	37	17	18	29	23	18	27	24	12	743
40-49	40	31	31	27	33	34	26	28	31	32	24	27	31	31	33	27	32	26	23	34	25	22	28	34	710
50-59	46	46	39	35	40	38	39	29	40	26	22	20	24	26	22	20	25	23	22	19	25	26	29	26	707
60 years old or more	12	11	19	13	7	16	19	12	15	13	10	16	17	10	10	10	17	14	13	14	18	9	18	15	328
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Workers' number of workplace of fatal and non-fatal accidents in glass 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	20	24	19	30	33	32	22	24	22	19	10	11	11	9	10	9	9	5	10	8	5	10	11	11	374
10-29	48	41	49	43	40	39	37	28	31	21	22	12	18	20	23	15	21	20	17	18	10	13	23	13	622
30-49	26	14	15	15	19	24	21	28	23	19	14	18	19	20	15	16	19	12	12	18	18	13	13	17	428
50-99	31	43	32	21	39	39	41	20	31	32	19	17	39	31	26	21	16	28	28	10	19	18	22	22	645
100-299	36	37	31	21	32	35	19	33	28	28	29	35	28	21	26	21	29	19	31	40	38	32	32	26	707
300 workers or more	21	24	25	21	19	13	10	18	16	17	9	17	11	16	18	17	14	12	11	6	12	11	12	14	364
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Month of fatal and non-fatal accidents in glass 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	9	13	15	5	8	17	11	17	8	20	7	15	9	6	6	8	16	9	13	11	7	7	12	12	261
February	11	9	9	13	10	10	9	11	18	9	10	10	11	13	13	9	4	6	8	7	8	11	4	11	234
March	18	19	22	9	15	12	20	12	7	3	11	6	10	10	11	8	6	4	15	16	9	9	14	7	273
April	17	12	6	8	14	13	15	13	8	9	5	5	12	10	8	6	11	6	5	6	9	4	8	10	220
May	18	16	10	13	15	12	9	9	13	18	11	11	8	6	14	7	8	8	11	7	7	11	10	5	257
June	14	20	14	13	19	30	7	9	20	10	9	11	14	11	12	11	7	7	9	7	10	7	6	7	284

July	17	17	24	19	22	15	14	15	19	17	13	12	11	10	8	9	11	7	9	8	10	13	9	5	314
August	18	19	11	13	21	14	16	18	11	11	8	9	11	12	10	6	11	8	10	7	7	6	13	13	283
September	17	17	22	18	20	19	14	10	8	12	8	8	6	11	9	16	7	8	7	6	14	10	5	6	278
October	14	13	13	9	15	13	14	14	15	11	8	11	5	12	10	7	9	13	7	11	7	5	11	6	253
November	15	13	17	19	11	15	12	10	11	6	6	8	15	5	10	2	12	10	6	7	6	6	11	12	245
December	14	15	8	12	12	12	9	13	13	10	7	4	14	11	7	10	6	10	9	7	8	8	10	9	238
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140

Prefecture of fatal and non-fatal accidents in glass 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	3		7		3		2	2	3	1	2		1	2	1	1		1		3		2		2	36
Aomori							1															1			2
Iwate	3	1	1		2		4	2		1				1	1	1	2						1	1	21
Miyagi	6		4		4		3	8	5	3	4		1	1	2	2		3	1	1			1		49
Akita										1	1	1	2		2	1	1	2	2	3	1	2	2		21
Yamagata	4	2	7		1			2	2	2			2	3	5		1	2	2	4	1	2	3	3	48
Fukushima	6	6	2		6		3	6	1	6	5	2	4	3	3	5	4	4	5	3	3	9	9	8	103
Ibaraki	6	5	13		3		3	3	9	6	5	7	5	3	3	6	2	3	4	6	6	5	3	6	112
Tochigi	5	2	1		1		1	1	2		1		3		1			1	2	1		1	2		25
Gunma	5	1	4		4		4	4	4	2	1	3	2	1	6	1	1	1			4	1		3	52

Shimane		1	2										1				2					1		7		
Okayama			1		1		1	1		3		2		1		1				3	2	4		2	22	
Hiroshima		1					2		1	2									1	1	2		1	2	13	
Yamaguchi	1	2	1		2		3		3		1						1		1			1			16	
Tokushima	2		1		2				1		2		1		1			1			1		3		15	
Kagawa					1											1				1					3	
Ehime																										
Kochi																										
Fukuoka	9	14	8		3		7	9	4	6	3		2	5	3	1	4	3	2	4	1	3	3	4	98	
Saga	1	3	1		2		1	2					3		3	2	1	1	2	2	2	1	1	2	3	33
Nagasaki	1				1								1			1			1						5	
Kumamoto	1	1			1		1		1		3		1					2		1			2		14	
Oita																										
Miyazaki	3	1								2	1	1				1		1	1		1	3	5	2	22	
Kagoshima	2	1			2					1	2	1	2												1	12
Okinawa					2		1					1		1	2											7
total	182	183	171	151	182	182	150	151	151	136	103	110	126	117	118	99	108	96	109	100	102	97	113	103	3,140	

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																			1					1	
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																			1					1	
unclassifiable																									
total		1	1			3	3	1	1	2			1		1	1			1	1	3	1		2	23

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

environment																									
high/cold temperature environment																				1				1	
other environments																									
other causal agent																									
no causal agent																				1				1	
unclassifiable																									
total		1	1			3	3	1	1	2			1		1	1			1	1	3	1		2	23

Workers age of fatal accidents in glass 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	1			6
30-39						1		1												1					3
40-49						1			1						1						1				4
50-59		1				1	2			1						1					1			2	9
60 years old or more										1															1
total		1	1			3	3	1	1	2			1		1	1			1	1	3	1		2	23

Workers' number of workplace of fatal accidents in glass 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						1																			1
10-29									1											1		1		1	4
30-49																			1		1			1	3
50-99		1				1	2	1					1									2			8
100-299			1							2						1									4
300 workers or more						1	1								1										3
total		1	1			3	3	1	1	2			1		1	1			1	1	3	1		2	23

Month of fatal accidents in glass 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				1	3
February		1																							1
March															1										1
April																					1				1
May																						1			1
June																					1				1

Shimane																									
Okayama																									
Hiroshima					1																		1		
Yamaguchi																									
Tokushima																									
Kagawa																									
Ehime																									
Kochi																									
Fukuoka																	1						1		
Saga																									
Nagasaki																									
Kumamoto																									
Oita																									
Miyazaki																									
Kagoshima																									
Okinawa																									
total		1	1			3	3	1	1	2			1		1	1			1	1	3	1		2	23

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