Fatal and non-fatal accidents in port cargo handling service in Japan in 1999-2021

port cargo handling service industry Code No.050202

Type of accidents in port cargo handling service 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	82	102	104	90	83	74	98	83	86	73	70	57	59	65	45	65	64	50	53	56	75	77	67	1,678	fall from height
falling to same level	43	35	39	41	35	34	41	40	32	20	22	34	36	29	27	33	20	25	28	30	34	22	35	735	falling to same level
crash	23	32	31	40	32	26	33	21	18	23	16	22	17	16	19	17	17	14	23	16	26	16	25	523	crash
struck by flying or falling object	56	45	54	47	39	49	37	31	34	33	22	23	15	21	20	34	19	27	13	23	24	18	24	708	struck by flying or falling object
collapse	17	18	24	13	12	9	14	18	12	19	6	13	10	9	14	11	10	6	4	5	7	10	7	268	collapse
crashed by	40	44	37	43	35	36	30	40	33	28	23	23	24	26	24	22	20	21	17	24	14	23	22	649	crashed by
caught in/between	83	91	98	89	99	95	73	60	65	60	40	54	57	42	38	50	37	41	48	46	45	39	35	1,385	caught in/between
cut	4	10	16	9	12	8	5	10	6	9	8	5	2	4	4	2	5	3	5	4	6	8	7	152	cut
injury to the sole of the foot			2	1	2			1	1					1			3	2				1	2	16	injury to the sole of the foot
drown				3	1	1				1			8					1	1				1	17	drown
contact to high/low- temperature	6	5	2	3	1	3		2	3	7		5	3	4	1	5	2	5	4	2	3	2	2	70	contact to high/low- temperature

contact to harmful	3	2		3			2	1	3	2			1	2			2			1					contact to
substance																									substance
electric shock												1						1	1					3	electric shock
explosion												1											1	2	explosion
burst				1																				1	burst
fire	1																	1						2	fire
traffic accident (public	7	5	2	3	2	4	8	3	6	2		7	3	3		2	3	1	14	6	19	5	7	112	traffic accident
road)																								112	(public road)
traffic accident		1	1			1	1		1		1		1	1	1								1	10	traffic accident
(others)											•		ľ		•										(others)
reaction to																									reaction to
motion/improper	33	32	33	30	42	28	23	23	25	25	19	12	20	23	12	24	12	10	17	19	26	19	28	535	motion/improper
motion																									motion
others	3	2	3	1		2		1		1		1	3	2				1		2	3	5	14	44	others
unclassifiable					1		1			1	1	1									2			7	unclassifiable
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

Causal agents (large) of fatal and non-fatal accidents in port cargo handling service 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)
Causar (L) agents		2000	2001	2002	2003	2004	2003	2000	2007	2000	2003	2010	2011	2012	2013	2014	2013	2010	2017	2010	2017	2020	2021		agents
machine	3	8	16	10	11	17	11	14	7	13	8	7	8	8	6	5	5	12	9	8	8	8	13	215	machine
crane, conveying																									crane,

machine	117	159	137	131	130	134	113	106	114	106	78	82	82	80	70	77	76	62	87	80	89	74	98	2,282	conveying
machine																									machine
athor aguinment	77	57	96	71	73	69	70	56	53	55	30	38	42	43	40	51	39	47	43	38	51	49	38		other
other equipment		57	90	/ 1	/3	09	/0	50	55	33	30	30	42	43	40	31	39	47	43	36	31	49	36	1,226	equipment
to many a many lavel discour																									temporary
temporary buildings, establishments	32	55	53	58	50	43	47	48	53	43	37	52	48	44	31	46	29	29	34	37	52	40	51	1,012	buildings,
establishments																									establishments
substance, material	61	52	41	55	47	35	55	40	49	42	22	28	26	14	26	35	21	21	19	18	29	20	20	776	substance,
substance, material	01	32	41	ردر	47	33	رد	40	49	42	22	20	20	14		٥٥	21	21	19	10	29		20	//0	material
load	80	81	89	78	64	52	52	58	39	36	46	41	31	40	26	33	35	24	25	37	35	36	31	1,069	load
environment	6	3	4	6	4	7	7	2	4	5	2	5	14	7	2	4	4	8	6	4	5	4	6	119	environment
others	25	9	10	8	17	13	11	10	6	4	5	6	8	12	4	14	5	6	5	12	15	14	21	240	others
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

Causal agents (middle) of fatal and non-fatal accidents in port cargo handling service 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						2	1					1	1	1			10	power transmission mechanism
woodworking machine	2	6	8	4	4	5	5	5	2	8	3	1	4			1	2	1	2	1	3	1	2	70	woodworking machine

construction machine	1	1	6	5	3	8	2	5	3	5	2	5	1	2	4	4	3	5	3	4	2	5	8	87	construction
																									machine
metal manufacturing																									metal
machine		1	1		1		1	2	1		1				1				2					11	manufacturing
																									machine
general machine			1	1	3	2	1	2	1		1	1	1	4	1			5	1	2	2	2	3	34	general
																									machine
mobile silviculture																									mobile
machine																		1						1	silviculture
																									machine
crane	34	52	41	32	34	41	25	29	32	26	14	20	20	13	15	22	17	21	17	6	16	15	12	554	crane
conveying machine	64	89	77	78	76	69	67	63	61	64	48	43	48	54	43	41	48	36	49	59	39	41	70	1,327	conveying
																									machine
vehicle	19	18	19	21	20	24	21	14	21	16	16	19	14	13	12	14	11	5	21	15	34	18	16	401	vehicle
pressure vessel																					1			1	pressure vessel
chemical facilities																									chemical
Chemical facilities																									facilities
uslding aguinment										1				1											welding
welding equipment														ľ										4	equipment
kiln, caldron																				1				1	kiln, caldron
																								_	electric
electric equipment				I								I							1				1	5	equipment
human power machine,	10	1.0	1.5			1.															1.	12	1.5	161	human power
tools	10	12	12	5	9	12	5	6	8	5	4	9	5	6	2	5	2	2	3	4	11	12	12	161	machine, tools

tools	65	39	74	58	60	55	57	46	40	43	26	25	32	29	35	39	29	36	30	27	33	29	24	931	tools
other equipments,	2	6	10	7	4	2	7	4	5	6		3	4	7	3	7	8	9	9	6	5	8	1	123	other equipments, facilities
temporary buildings, establishments	32	55	53	58	50	43	47	48	53	43	37	52	48	44	31	46	29	29	34	37	52	40	51	1,012	temporary buildings, establishments
hazards, harmful substances	4	2	1	3			1	2	3	3			1	1		1	1	1		1				25	hazards, harmful substances
materials	57	50	40	52	47	35	54	38	46	39	22	28	25	13	26	34	20	20	19	17	29	20	20	751	materials
load	80	81	89	78	64	52	52	58	39	36	46	41	31	40	26	33	35	24	25	37	35	36	31	1,069	load
natural environment	6	3	4	6	4	7	7	2	4	5	2	5	14	7	2	4	4	8	6	4	5	4	6	119	natural environment
other causal agent	17	7	2	4	5	5	2	5	1	3	2	1	2	3		3	2	1	1	4	2	2	13	87	other causal
no causal agent	7	2	8	4	10	8	8	5	4	1	3	4	6	8	4	10	3	5	4	8	11	12	8	143	no causal agent
unclassifiable	1				2		1		1			1		1		1					2			10	unclassifiable
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

Causal agents (small) of fatal and non-fatal accidents in port cargo handling service 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										2	engine
power transmission mechanism				2						2	1					1	1	1			8	power transmission mechanism
circular sawing machine		3	3	2	2		2	1		2			1		1	1		2		2	22	circular sawing machine
band sawing machine																						band sawing machine
wood planer machine																						wood planer machine
hollow chisel mortiser, wood borer					1																1	hollow chisel mortiser, wood borer
chamfering machine, router, woodworking milling machine																						chamfering machine, router, woodworking milling machine
chain saw		3	1	3	2	1	4	1	1	1				2			1	1			21	chain saw
other woodworking machines		2				1	2	1		1						1			1		9	other woodworking machines
leveling, transporting or loading machine		2		2	2	2	4	2	3		2	2		3	2	2	2	1	4	3	38	leveling, transporting or loading machine
excavating machine		3	1		2	1	1		2	1		1	4		2		2	1	1	4	26	excavating machine
foundation work																						foundation work

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

machine																						machine
food manufacturing																						food manufacturing
machine																						machine
printing machine																						printing machine
industrial robot																						industrial robot
other general		1	3	1	2	1		1	1	1	4	1			5	1	1	2	2	3	30	other general
power machines																						power machines
felling machine																						felling machine
mobile logging																						mobile logging
machine																						machine
skyline yarding																						skyline yarding
machine															1						1	machine
other mobile																						other mobile
silviculture machine																						silviculture machine
crane		19	16	8	17	16	14	9	11	8	10	7	13	7	11	7	3	8	8	7	199	crane
mobile crane		12	12	10	4	8	8	3	3	8	2	2	2	8	4	6	2	5	4	2	105	mobile crane
derrick crane		3			1	1			1	1											7	derrick crane
elevator, lift						1		1	1					1		1		1	1		7	elevator, lift
cargo lifting		_	_																		62	cargo lifting
appliance		5	5	5	6	6	3		3	2	ľ	4	4		6	3	I	2	2	2	62	appliance
gondola																						gondola
lumberyard																						lumberyard
equipment, logging																						equipment, logging
cableway																						cableway

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simple skyline yarding equipment																								simple skyline yarding equipment
other powered			2	1		2	1		1		1	1		2	3							1	15	other powered
truck			25	26		26	17	22	23	17	16	17	18	9	13	19	7	20	27	16	15	23	356	truck
forklift			48	40		30	34	31	28	23	20	21	29	29	20	24	23	22	26	18	20	36	522	forklift
railway equipment						1																	1	railway equipment
conveyor			1	5		5	3	2	4	4	4	3	4	3	4	4	3	5	3	3		5	65	conveyor
loader				1		2	2	1	2	1		1	1			1	1				4	2	19	loader
straddle carrier				2					3		1	2		1	2		1		2	1		1	16	straddle carrier
rough terrain hauler																								rough terrain hauler
other powered conveying machines			3	2		3	7	5	4	3	2	4	2	1	2		1	2	1	1	2	3	48	other powered conveying machines
cars, bus,			5	7		7	4	8	5		10	3	5	4	3	4	2	10	4	21	8	6	116	cars, bus, motorcycle
railway vehicle																								railway vehicle
other vehicles			14	13		14	10	13	11	16	9	11	8	8	11	7	3	11	11	13	10	10	203	other vehicles
boiler																								boiler
pressure vessel																				1			1	pressure vessel
other pressure vessels																								other pressure vessels
chemical facilities																								chemical facilities
gas welding						1			1				1							1			4	gas welding

equipment																						equipment
arc welding																						arc welding
equipment								<u> </u>	<u> </u>												_	equipment
other welding																						other welding
equipment																						equipment
kiln, caldron																						kiln, caldron
industrial dryer																	1				1	industrial dryer
other kiln, caldron																						other kiln, caldron
transmission										1						1					2	transmission
electric power																						electric power
facilities									1												2	facilities
other electrical																						other electrical
equipment																						equipment
human power																						human power
cranes		1							1												3	cranes
human power		1	1	_	2	1		1	2	1			1				1				22	human power
hauling equipment		ľ		2	3	1	2		3	I	2		I				ľ	2	2		23	hauling equipment
human power																						human power
machine			I	2	ľ													l I		ı	6	machine
hand tool		10	7	1	2	7	3	3	5	4	3	2	4	2	2	3	3	8	10	11	90	hand tool
ladder		21	18	19	11	10	8	7	8	5	9	11	11	6	10	8	10	9	9	11	201	ladder
slinging tool		17	15	8	12	11	11	11	8	7	4	8	8	8	7	7	5	4	4	6	161	slinging tool
other tools		36	27	30	23	19	24	8	9	20	16	16	20	15	19	15	12	20	16	7	352	other tools
other equipment,																						other equipment,

facilities	10		4	7	4	5	6		3	4	7	3	7	8	9	9	6	5	8	1	106	facilities
scaffolding	2		1	1		1	1		1				1				1	1	1	1	12	scaffolding
timbering																						timbering
stairs, landing stage	6		5	9	9	7	6	3	9	10	6	7	7	4	5	4	4	8	12	6	127	stairs, landing stage
opening	2		5	3		1	5	5	3	2	3	2	2	2	2	1	7	2	4	1	52	opening
roof, beam, haze, crossbeam, principal rafter									2		1	1	1	1							6	roof, beam, haze, crossbeam, principal rafter
working platform, boot board	17		10	7	10	9	11	10	9	14	11	7	6	4	5	6	7	10	4	6	163	working platform, boot board
passage	16		14	16	18	21	8	10	12	13	9	8	11	11	9	15	13	16	9	21	250	passage
building, establishment	6		10	5	8	8	8	5	11	5	7	4	9	4	3	5	4	11	6	8	127	building, establishment
other temporary buildings, establishments	4		5	6	3	6	4	4	5	4	7	2	9	3	5	3	1	4	4	8	87	other temporary buildings, establishments
explosive substance	1				1																2	explosive substance
inflammable substance					1								1								2	inflammable substance
inflammable gas																						inflammable gas
harmful substance						3	2			1	1						1				8	harmful substance
radiation																						radiation
other hazards,				1			1							1	1						4	other hazards, harmful substances

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metal material		18	3		30	34	23	30	24	12	19	18	9	15	21	15	13	14	13	18	12	13	351	metal material
lumber, bamboo		16	5		13	16	9	9	8	8	7	5	3	9	6	4	7	5	3	6	5	5	144	lumber, bamboo
stone, sand, substance		2					3		1	1					1				1	1		1	11	stone, sand, substance
other materials		4			4	4	3	7	6	1	2	2	1	2	6	1				4	3	1	51	other materials
load		83	3	(63	52	57	38	36	43	40	31	38	25	32	34	23	25	36	34	35	31	756	load
machine/equipment as load		6		1	1		1	1		3	1		2	1	1	1	1		1	1	1		22	machine/equipment as load
natural ground, rock						1				1			1										3	natural ground, rock
standing tree		1						1															2	standing tree
water												8					1	1				1	11	water
abnormal environment						1	1									1							3	abnormal environment
high/cold temperature environment				1	1			1	2		4	2	3		2	2	4	2	2	2	2	2		high/cold temperature environment
other environments		3		3	3	5	1	2	3	1	1	4	3	2	2	1	3	3	2	3	2	3	47	other environments
other causal agent		2		5	5	2	5	1	3	2	1	2	3		3	2	1	1	4	2	2	13	54	other causal agent
no causal agent		8		-	10	8	5	4	1	3	4	6	8	4	10	3	5	4	8	11	12	8	122	no causal agent
unclassifiable					2	1		1			1		1		1					2			9	unclassifiable
total		44	46	3	396	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	5,327	total

Workers age of fatal and non-fatal accidents in port cargo handling service 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	8	2	9	5	5	8	5	5	4	3		4	2	5	4	12	7	7	8	5	4	119	19 years old or less
20-29	70	68	77	72	73	70	43	63	51	46	25	38	34	50	32	38	38	30	31	42	45	29	49	1,114	20-29
30-39	70	77	79	95	101	84	81	63	84	86	51	60	69	48	50	58	46	43	32	46	65	65	62	1,515	30-39
40-49	71	71	84	78	61	67	84	58	59	55	59	67	59	61	54	70	65	55	61	58	70	51	67	1,485	40-49
50-59	162	163	154	133	113	102	104	98	81	67	45	59	57	50	44	59	34	38	61	55	53	55	68	1,855	50-59
60 years old or	26	40	44	37	39	42	49	44	45	45	44	32	40	35	23	35	27	31	36	26	43	40	28	851	60 years old or
more						72						52												ll l	more
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

Workers' number of workplace of fatal and non-fatal accidents in port cargo handling service 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	39	56	53	48	43	38	34	43	35	28	18	21	24	20	18	30	20	21	22	20	23	15	22	691	9 workers or less
10-29	92	100	105	115	110	83	77	94	88	76	61	58	51	75	51	66	47	64	51	54	68	62	52	1,700	10-29
30-49	41	50	77	62	75	72	60	49	52	62	47	73	51	50	36	41	43	37	58	57	62	57	65	1,277	30-49
50-99	108	112	114	103	107	93	94	74	69	58	57	49	51	42	36	50	45	40	46	37	60	52	67	1,564	50-99
100-299	96	85	84	71	46	70	93	68	72	70	38	47	70	54	56	73	50	43	44	61	66	54	69	1,480	100-299
300 workers or	25	21	13	18	15	14	8	6	9	10	7	11	12	7	8	5	9	4	7	5	5	5	3	227	300 workers or
more													12					•							more
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

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	27	34	36	30	28	30	30	23	19	20	23	17	19	21	7	25	22	18	14	16	30	24	20	533	January
February	34	29	33	26	21	37	28	25	24	25	15	24	23	16	17	18	13	19	28	19	33	26	18	551	February
March	37	51	40	33	34	32	36	27	39	21	19	24	36	29	25	24	27	17	16	15	22	16	20	640	March
April	24	48	42	43	35	37	24	25	24	25	22	20	18	19	21	22	17	11	15	15	25	21	23	576	April
May	32	43	35	35	43	28	39	31	29	28	18	26	24	22	23	15	27	13	21	23	24	21	27	627	May
June	28	30	47	30	33	34	41	31	22	26	8	23	18	24	12	25	15	14	12	19	22	20	19	553	June
July	42	28	39	44	41	34	25	25	32	34	21	16	22	25	11	24	14	19	27	23	20	17	28	611	July
August	31	32	37	38	29	27	29	33	25	22	20	17	7	18	26	22	16	20	18	27	21	24	29	568	August
September	35	30	34	32	30	25	20	32	32	23	17	23	27	19	15	20	14	18	16	19	33	21	26	561	September
October	40	36	41	45	32	28	24	33	38	23	26	19	24	25	16	23	17	27	27	21	13	21	24	623	October
November	36	26	31	31	25	31	31	25	20	31	20	24	17	10	10	25	16	19	16	15	25	18	22	524	November
December	35	37	31	30	45	27	39	24	21	26	19	26	24	20	22	22	16	14	18	22	16	16	22	572	December
total	401	424	446	417	396	370	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,939	total

Prefecture of fatal and non-fatal accidents in port cargo handling service 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	17	16	24		23		12	17	23	21	16	10	10	18	9	15	7	9	3	7	10	8	8	283	Hokkaido
Aomori	5	1	1		1		5	3	2	4	2			4	1		3	2	1	1	3	4	2	45	Aomori
lwate		1	2		2		2		1		1	1	1		1		1						1	14	lwate
			\vdash		$\vdash \vdash$		$\vdash \vdash$	==	\vdash				=		\vdash					$\vdash \vdash$	_		\vdash		

Miyagi	5	5	9	8	8	7	4	8	3	12	16	11		5	1		1	6	4	4	8	125	Miyagi
Akita	1	2	2	1	2			2	1	2	1			1	3	1	1		1		1	22	Akita
Yamagata																							Yamagata
Fukushima	2		1	1	4	2	2	2	1	4	1	5			1	1	1	3	3	2	2	38	Fukushima
Ibaraki	2	2	5	7	2	6	2	1	2	3	2	4	1	3	2	2	2	4	1	2	4	59	lbaraki
Tochigi																							Tochigi
Gunma																							Gunma
Saitama																							Saitama
Chiba	11	13	23	10	11	12	17	5	7	9	7	6	5	12	3	7	10	6	9	7	9	199	Chiba
Tokyo	19	21	16	12	13	15	6	18	16	18	19	13	15	18	12	10	18	13	25	16	25	338	Tokyo
Kanagawa	54	43	70	48	51	43	46	50	33	34	41	27	19	36	28	22	27	24	32	31	25	784	Kanagawa
Niigata	3	6	2	1	3	4	5	2	1	3	1	2	4	8	4	1	2	6	7	4	4	73	Niigata
Toyama		2	2	3	2		1	1		1	2	3		1	1	1	2	2			1	25	Toyama
Ishikawa		2	4	1		2	1	2		2		1	2	4			1	1	2	2	1	28	Ishikawa
Fukui	2	1	4	2	2	2	1		2		1	1	1	1		3	4	2	1	1	3	34	Fukui
Yamanashi																							Yamanashi
Nagano																							Nagano
Gifu																							Gifu
Shizuoka	11	12	12	9	13	17	13	9	4	11	9	10	5	6	5	5	9	6	7	9	4	186	Shizuoka
Aichi	52	62	44	45	27	32	35	27	12	30	25	25	27	36	20	20	17	27	34	29	34	660	Aichi
Mie	3	6	3	3	2		3		3			3			4		4	2	2	4	1	43	Mie
Shiga																							Shiga
Kyoto	1	3	2		2	2			1		1		2	1	1	1	1		2	1		21	Kyoto

Osaka	84	94	81	92	71	55	45	54	42	37	38	40	40	35	30	31	31	21	21	24	37	1,003	Osaka
Hyogo	30	29	38	32	38	23	36	33	24	12	19	23	21	19	14	22	17	18	19	15	16	498	Hyogo
Nara																							Nara
Wakayama	2	3	3		1	1	3		2		2	1	1		2		1		2	3	1	28	Wakayama
Tottori	2			1		4	1		1	2	3	1		2			1	1	2		2	23	Tottori
Shimane				1	1		1	1	1	1			1			1						8	Shimane
Okayama	7	3	4	4	6	7	3	1	2	4	4	2	1	3	1	2	1	4	2	1	3	65	Okayama
Hiroshima	22	17	19	11	15	14	20	10	12	9	8	7	8	11	10	16	6	13	12	18	7	265	Hiroshima
Yamaguchi	7	5	8	4	7	9	3	6	1	2	4	1		2	2	2	4	2	4	4	4	81	Yamaguchi
Tokushima	2	2		4	2	5	3	1	4	1	2	1	1	2	1		1	1		2	5	40	Tokushima
Kagawa	6	7	5	6	7	9	5	9	3	5	5	2	2	5	10	7	3	7	7	2	6	118	Kagawa
Ehime	4	7	10	6	4	4	4	2	4	1	5	4	3	4	9	3	7	3	8	4	7	103	Ehime
Kochi	6	2	2	2	1			2		2				1	2			1	1	1		23	Kochi
Fukuoka	17	28	22	31	25	15	17	18	13	18	11	17	17	15	19	21	17	24	25	23	21	414	Fukuoka
Saga						1										1	2	4	1	2	1	12	Saga
Nagasaki	2	2	3	2	7	4	1	4	3	5	2	3	4	4	3	4	5	9	11	7	8	93	Nagasaki
Kumamoto	3	1	3	2		1	1	2			2		1		1	3	3	2		3	3	31	Kumamoto
Oita	1	4	1	3	3	1	1				1			2		2	2		2	1	2	26	Oita
Miyazaki	1	3	4			1	1										1	1			2	14	Miyazaki
Kagoshima	12	13	11	11	10	10	7	8	9	10	12	10	7	9	8	8	15	9	17	8	11	215	Kagoshima
Okinawa	5	6	6	7	7	6	11	1	2	10	4	3	6	4	6	1	7	4	7	3	9	115	Okinawa
total	401	424	446	396	366	334	325	304	228	259	259	248	205	265	214	209	228	234	284	245	278	6,152	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)

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

Fatal accidents in port cargo handling service in Japan in 1999-2021

port cargo handling service industry Code No.050202

Type of fatal accidents in port cargo handling service 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	2	1	4	3		2	1	1	3	2	5		3			1		1	1			1		31	fall from height
falling to same level			1																	1	1			3	falling to same
laming to same level																									level
crash																									crash
struck by flying or	2			1		2	1	4	2	1						1		1	1					21	struck by flying
falling object	3	2		I		2	I	4	2	ľ								I	1						or falling object
collapse	1	1	3	1	3			1	1			1	1		1							1	1	16	collapse
crashed by	1		4	2	2	1	1	5	1	1		1		1		1		2	1		2		1	27	crashed by
saught in/hatwaan		2	3	2	2	2	1	2	2	1	4	2	2	3	2		5	2	3	1	2	1	1	45	caught
caught in/between			3							1	4			3			J		3	1				43	in/between
cut																									cut

<u> </u>																									
injury to the sole of the foot																									injury to the sole
drown	1	1		3	1	1				1	1		8					1	1				1	20	drown
contact to high/low- temperature															1	1									contact to high/low- temperature
contact to harmful substance		1					1										1								contact to harmful substance
electric shock																									electric shock
explosion																									explosion
burst																									burst
fire																									fire
traffic accident (public road)	1						1			1			1								1			5	traffic accident (public road)
traffic accident (others)															1									1	traffic accident (others)
reaction to motion/improper motion																									reaction to motion/improper motion
others													1											1	others
unclassifiable							1							1										2	unclassifiable
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

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					2		1		1			7	machine
crane, conveying machine	7	3	6	6	3	4	3	9	3	4	5	2	4	4	3	2	3	4	4	2	5	1	1	88	crane, conveying machine
other equipment	1		2	1	3	1		1		1					1								1	12	other equipment
temporary buildings, establishments		1	2		2		1		2		2		2					2	1			1	1		temporary buildings, establishments
substance, material			1			1		1	1															4	substance, material
load	1	3	4	4	1	2		2	2	2	2	1	1		1	1						1		28	load
environment		1		1	1		1				1		8			1	1	1	1				1	18	environment
others							1						1	1										3	others
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

Causal agents (middle) of fatal accidents in port cargo handling service in 1999-2021

Causal (M) agents	1000	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2010	2020	2021	total	Causal (M)
causai (ivi) agents	1999	2000	2001	2002	2003	2004	2003	2000	2007	2008	2009	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	2020	2021	totai	agents

engine																										engine
power transmission mechanism																										power transmission mechanism
woodworking machine																										woodworking machine
construction machine							1		1			1					2		1		1				7	construction machine
metal manufacturing machine																										metal manufacturing machine
general machine																										general machine
mobile silviculture machine																										mobile silviculture machine
crane	4	1	2	1	1	1	2	4	1	1	1	1		2	2	1	1	2	1		2	1	I		32	crane
conveying machine	2	1	3	2	2	2		5	1	2	3	1	2	2			2	2	3	2	3			1	41	conveying machine
vehicle	1	1	1	3		1	1		1	1	1		2		1	1									15	vehicle
pressure vessel																										pressure vessel
chemical facilities																										chemical facilities
welding equipment																										welding equipment

	_											ـــــــال	<u> </u>	<u> </u>			<u> </u>		<u> </u>	<u> </u>				
kiln, caldron																								kiln, caldron
electric equipment																								electric
erecure equipment																								equipment
human power machine,																								human power
tools																								machine, tools
tools	1		2	1	3	1		1							1							1	11	tools
other equipments,																								other
facilities										1													1	equipments,
lucinites																								facilities
temporary buildings,																								temporary
establishments		1	2		2		1		2		2		2					2	1		1	1	17	buildings,
Cstabilistiments																								establishments
hazards, harmful																								hazards,
substances																								harmful
substances																								substances
materials			1			1		1	1														4	materials
load	1	3	4	4	1	2		2	2	2	2	1	1		1	1					1		28	load
				1			1									1	1		1				18	natural
natural environment					I								8				I	<u> </u>					18	environment
other causal agent																								other causal
other causar agent																								agent
no causal agent													1										1	no causal
nio causai agent																								agent
unclassifiable							1							1									2	unclassifiable

total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total	
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Causal agents (small) of fatal accidents in port cargo handling service 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																									power transmission
circular sawing																									circular sawing
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																									other woodworking

leveling,															leveling,
transporting or				1			1			2	1	1		6	transporting or
loading machine															loading machine
excavating machine					1									1	excavating machine
foundation work															foundation work
machine															machine
hardening machine															hardening machine
demolition machine															demolition machine
vehicle for high lift															vehicle for high lift
work															work
other construction															other construction
machines															machines
lathe															lathe
drill press, milling															drill press, milling
machine															machine
grinding machine,															grinding machine,
buffing machine															buffing machine
power press															power press
forging pressure															forging pressure
hammer															hammer
shearing machine															shearing machine
other metal															other metal
manufacturing															manufacturing
machines															machines

centrifugal machine																		centrifugal machine
mixer, grinder																		mixer, grinder
roll machine (except printingroll machine)																		roll machine (except printingroll machine)
injection molding machine																		injection molding
food manufacturing																		food manufacturing machine
printing machine																		printing machine
industrial robot																		industrial robot
other general power machines																		other general power machines
felling machine																		felling machine
mobile logging																		mobile logging
skyline yarding machine																		skyline yarding machine
other mobile silviculture machine																		other mobile silviculture machine
crane	2		1				2	1	1		1			1	1		10	crane
mobile crane	2	1		1	1	2							1		1		9	mobile crane
derrick crane																		derrick crane
elevator, lift																		elevator, lift

cargo lifting			1			 1	2		1		1		1	2	 1		2				1		13	cargo lifting
appliance																								appliance
gondola																								gondola
lumberyard																								lumberyard
equipment, logging																								equipment, logging
cableway																								cableway
simple skyline																								simple skyline
yarding equipment																								yarding equipment
other powered																								other powered
crane																								crane
truck	1	1			1				1	1		1								2			8	truck
forklift	1		3	2	1	2	4	1	1	1			1			2		2				1	22	forklift
railway equipment																								railway equipment
conveyor										1		1	1				1	1	1				6	conveyor
loader																								loader
straddle carrier											1						1		1	1			4	straddle carrier
rough terrain hauler																								rough terrain hauler
other powered							1																	other powered
conveying machines																								conveying machines
cars, bus,				1																				cars, bus,
motorcycle				I																			2	motorcycle
railway vehicle																								railway vehicle
other vehicles	1	1	1	2		1		1	1	1		2		1	1								13	other vehicles
boiler																								boiler

		 	 	 ==	 ==	 							
pressure vessel													pressure vessel
other pressure													other pressure
vessels													vessels
chemical facilities													chemical facilities
gas welding													gas welding
equipment													equipment
arc welding													arc welding
equipment													equipment
other welding													other welding
equipment													equipment
kiln, caldron													kiln, caldron
industrial dryer													industrial dryer
other kiln, caldron													other kiln, caldron
transmission													transmission
electric power													electric power
facilities													facilities
other electrical													other electrical
equipment													equipment
human power													human power
cranes													cranes
human power													human power
hauling equipment													hauling equipment
human power													human power
machine													machine

hand tool																					hand tool
ladder				1																1	ladder
slinging tool			1					1												2	slinging tool
other tools	1		1		3	1							1						1	8	other tools
other equipment,										1										∥1	other equipment,
scaffolding																					scaffolding
timbering																					timbering
stairs, landing stage															1	1				2	stairs, landing stage
opening			1								1									2	opening
roof, beam, haze, crossbeam, principal rafter																					roof, beam, haze, crossbeam, principal rafter
working platform, boot board		1	1				1					1								4	working platform, boot board
passage									2											2	passage
building, establishment					1						1	1								3	building, establishment
other temporary buildings, establishments					1										1			1	1	4	other temporary buildings, establishments
explosive substance																					explosive substance
inflammable substance																					inflammable substance

														 					 				4
inflammable gas																							inflammable gas
harmful substance																							harmful substance
radiation																							radiation
other hazards,																							other hazards,
harmful substances																							harmful substances
metal material						1		1	1													3	metal material
lumber, bamboo																							lumber, bamboo
stone, sand,																							stone, sand,
substance																							substance
other materials			1																			1	other materials
load	1	3	4	4	1	2		2	2	2	2	1	1	1	1					1		28	load
machine/equipment																							machine/equipment
as load																							as load
natural ground,																							natural ground,
rock																							rock
standing tree																							standing tree
water				1							1		7				1	1			1	12	water
abnormal		1					1									1							abnormal
environment		I					Ľ															3	environment
high/cold																							high/cold
temperature															1							1	temperature
environment																							environment
other environments					1								1									2	other environments
other causal agent																							other causal agent

no causal agent													1											1	no causal agent
unclassifiable							1							1										2	unclassifiable
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

Workers age of fatal accidents in port cargo handling service 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								1	1		1							1						4	19 years old or less
20-29			3	2	1	1		2		1			1	1			1	1			2	3		19	20-29
30-39	3		2		3	1	1	3	3		3		4	1			4	1	1					30	30-39
40-49		1	1	2	1	1	1		1		2	1	2	1	3	2		1	4	1	3			28	40-49
50-59	3	6	4	7	4		3	3	2	4	1	2	6	2	2	1	1	1	2	1	1		2	58	50-59
60 years old or more	3	1	5	1	1	5	2	4	2	2	3	1	3			1		2					2	38	60 years old or more
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

Workers' number of workplace of fatal accidents in port cargo handling service 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	2	1	5	1	2	1				1	1	1	1			1	1	2	2				2	24	9 workers or less
10-29	2	2	2	4	4	3	1	4	4	1	3	1	1	1		2	1	2	2	1	1		2	44	10-29
30-49		3	3	3	2		2	4	1	2	2		4	1	3		1	1	3		1	1		37	30-49
50-99	3	1	1	2	1	3	2	1		1	2	2	5	1	1		1	2		1	1	1		32	50-99

100-299		1	3	2		1	2	4	4	2	1		5		1	1	2				3	1		33	100-299
300 workers or	2		1		1						1			2										7	300 workers or
more											•														more
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

Month of fatal accidents in port cargo handling service 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	2	3	1	1	1	1	1		3				1				2	1	1		3			21	January
February		1			1			1						1						1		1		6	February
March			3		2	2	1	2	2			1	9	2	2									26	March
April	1	1		1	2			1		1	1				1	1		1						11	April
May			1	2		1	1	1			1	2	2	1			1	1	1				1	16	May
June		1	1	1	1	1	2	1						1			1		1	1	1	1		14	June
July			2	2		1		2	1	2	2		1			2		1	1					17	July
August	2	1	2	1	1				1	1	1				2			1	1		1	1		16	August
September	1		3	2				2		2		1				1			1					13	September
October			1	1	1		1	1			3		3				1	2					1	15	October
November	1	1	1	1		1	1	2	1												1		2	12	November
December	2				1	1			1	1	2						1		1					10	December
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

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		2	3	1	1	1				1	1		1			1							13	Hokkaido
Aomori																					1			1	Aomori
lwate																									lwate
Miyagi					1								8											9	Miyagi
Akita																									Akita
Yamagata																									Yamagata
Fukushima									1										1					2	Fukushima
lbaraki					1			1								1	1							4	Ibaraki
Tochigi																									Tochigi
Gunma																									Gunma
Saitama																									Saitama
Chiba		1	2					2	2					1		2		1					2	13	Chiba
Tokyo	2	3		1	3	1					1		2		1				1					15	Tokyo
Kanagawa	3	1	5	1		2	2	3		3	3	1	2				2	1		1	1			31	Kanagawa
Niigata									1															1	Niigata
Toyama																									Toyama
Ishikawa																									Ishikawa
Fukui																									Fukui
Yamanashi																									Yamanashi
Nagano																									Nagano
Gifu																									Gifu

Shizuoka						1																	1	Shizuoka
Aichi		1		3	2	1		3	1						1		1			1	2		16	Aichi
Mie			2																				2	Mie
Shiga																								Shiga
Kyoto																								Kyoto
Osaka			2	1		1		1	2	2	2	1			1	1		1					15	Osaka
Hyogo				1		1		1			2	1	1		1	1	2				1		12	Hyogo
Nara																								Nara
Wakayama											1												1	Wakayama
Tottori													1	1									2	Tottori
Shimane															1								1	Shimane
Okayama													2										2	Okayama
Hiroshima	1								2					1									4	Hiroshima
Yamaguchi	1						1													1			3	Yamaguchi
Tokushima																						1	1	Tokushima
Kagawa																	1						1	Kagawa
Ehime								1												1			2	Ehime
Kochi																								Kochi
Fukuoka		2			1		1			1									1	1			7	Fukuoka
Saga																		1					1	Saga
Nagasaki							1											1					2	Nagasaki
Kumamoto				1														1					2	Kumamoto
Oita							1										1						2	Oita

Miyazaki																									Miyazaki
Kagoshima	1							1		1				1		1			1					6	Kagoshima
Okinawa			2	1	1																		1	5	Okinawa
total	9	8	15	12	10	8	7	13	9	7	10	4	16	5	5	4	6	7	7	2	6	3	4	177	total

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

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