fuel retail industry Code No.080204

Type of accidents in fuel retail 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	125	111	124	148	150	142	146	105	124	128	102	97	118	99	109	113	110	101	130	130	136	114	132	2,794	fall from height
falling to same level	176	151	170	173	167	168	155	145	145	135	135	112	155	158	140	133	121	129	145	167	139	132	163	3,414	falling to same level
crash	43	41	41	34	44	33	33	34	28	32	22	21	23	22	30	21	29	35	21	29	31	30	30	707	crash
struck by flying or falling object	54	31	48	17	37	25	25	23	17	26	21	23	19	11	21	16	16	16	12	12	20	11	23	524	struck by flying or falling object
collapse	8	10	18	10	9	9	12	14	12	5	8	6	6	4	6	3	4	10	2	7	6	7	4	180	collapse
crashed by	31	31	25	20	26	32	27	28	28	26	17	18	23	19	16	12	10	19	13	15	18	11	17	482	crashed by
caught in/between	101	77	115	75	67	73	69	53	72	45	51	44	47	50	42	42	50	39	31	44	41	39	33	1,300	caught in/between
cut	21	17	19	11	16	14	13	18	8	10	7	4	10	7	4	7	6	12	6	2	12	8	5	237	cut
injury to the sole of the foot	3	2	1	2	1	3		1			1	1	1		1		1		1	2			1	22	injury to the sole
drown											1		18									1		20	drown
contact to high/low- temperature	24	16	21	25	15	13	14	9	10	9	10	5	3	14	4	8	7	4	7	13	8	10	11	260	contact to high/low- temperature

contact to harmful substance	3	6	4	2		4	3	2	2	1		1	4	2		1		1	1	3		2	2		contact to harmful substance
electric shock												1	1		1		1	1						5	electric shock
explosion	1	2	1	2			3			1				1		1								12	explosion
burst	6	8	6	7	3	9	5	4	7	8	3	3	2	5	5	2	1	5	2		2	5	1	99	burst
fire	1	2		2	1	3	1	2	4	2		2	2		2	1		1	1	2			2	31	fire
traffic accident (public road)	66	57	57	62	61	57	49	42	49	35	36	41	35	43	29	39	37	26	31	31	30	18	28	959	traffic accident (public road)
traffic accident (others)	4		1	3	1		1	1		1	3		1	2		1	1	2	1	1	1	3	1	29	traffic accident (others)
reaction to motion/improper motion	88	78	70	88	67	49	66	58	71	65	43	61	75	73	62	77	46	59	68	81	60	71	87	1,563	reaction to motion/improper motion
others	3	7	12	3	7	4	5	7	5	9	3	2	12	2	3	1	6	2	3	3	3	5	16	123	others
unclassifiable	2	3	3	4	1	3	1	2	2	4	3	1	2	1	1				1	2	2	2		40	unclassifiable
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Causal agents (large) of fatal and non-fatal accidents in fuel retail 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	35	37	50	30	26	28	28	22	36	22	23	20	18	19	23	21	16	25	21	15	17	15	20	567	machine
crane, conveying																									crane,

II.	250	180	197	195	188	187	178	137	151	128	131	117	117	127	103	109	119	105	102	108	116	95	104	3,244	conveying
machine																									machine
other equipment	108	112	118	108	99	110	97	96	103	114	80	72	86	83	93	98	88	94	89	97	106	90	124	2,265	other
other equipment	100	112	110	108	99	110	37	90	103	114	80	/ 2	80	65	93	96	00	24	69	97	100		124	2,203	equipment
tomporary buildings																									temporary
temporary buildings, establishments	196	174	194	206	211	195	181	172	167	154	157	141	188	169	156	129	147	145	156	196	183	157	176	3,950	buildings,
establisimients																									establishments
substance, material	31	29	41	28	32	31	31	23	19	17	9	17	17	15	8	15	7	11	13	14	6	16	16	446	substance,
substance, material	31	29	-1	20	52	31	31	23		'		17								-				140	material
load	66	50	61	47	56	39	48	38	44	40	23	38	31	29	25	29	19	27	24	32	29	29	42	866	load
environment	25	21	35	20	23	18	25	27	20	25	17	17	50	23	33	35	21	27	32	43	26	28	26	617	environment
others	49	47	40	54	38	33	40	33	44	42	26	21	50	48	35	42	29	28	39	39	26	39	48	890	others
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Causal agents (middle) of fatal and non-fatal accidents in fuel retail 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		2						1					1				1	1				1	8	engine
power transmission mechanism	5	5	4	3	4	2	1	3	2	2	1	2	2	1	4	2	1	3	1	1	1			50	power transmission mechanism
woodworking machine	1	4	3	1	1	5	1		3	1	1		1	2	1	3			1	1	1		2	33	woodworking machine
																									construction

construction machine	11	6	17	13	10	10	11	6	12	11	8	7	7	6	8	9	5	10	8	6	9	9	8	207	machine
metal manufacturing machine	3	6	5	5	2	5	3	3	2	2	4	2	2		3	2	3	3	4	2	3		2	66	metal manufacturing machine
general machine	14	16	19	8	9	6	12	10	16	6	9	9	6	9	7	5	7	8	6	5	3	6	7	203	general machine
mobile silviculture machine																									mobile silviculture machine
crane	5	6	10	7	4	10	9	5	7	7	7	1	2	4	4	2	6	3	3	5	5	3	4	119	crane
conveying machine	113	75	87	80	83	67	72	69	72	54	52	46	51	61	43	52	56	56	58	53	64	58	56	1,478	conveying machine
vehicle	132	99	100	108	101	110	97	63	72	67	72	70	64	62	56	55	57	46	41	50	47	34	44	1,647	vehicle
pressure vessel	12	11	15	7	7	4	6	6	10	4	3	5	4	7	6	6	6	8	6	3	4	2	9	151	pressure vessel
chemical facilities			1			3	2	1							1	2	1		1					12	chemical facilities
welding equipment	1			1				2		2					1			1					1	9	welding equipment
kiln, caldron	2				1					1														4	kiln, caldron
electric equipment	2	2			1	1			1	1	1	1				2				2	2		1	17	electric equipment
human power machine, tools	20	20	32	18	23	18	21	14	9	11	6	4	12	6	10	16	12	6	6	6	12	11	9	302	human power
tools	43	49	53	61	47	59	54	52	48	69	55	47	53	49	53	50	52	65	57	64	64	64	80	1,288	tools

other equipments,																									other
facilities	28	30	17	21	20	25	14	21	35	26	15	15	17	21	22	22	17	14	19	22	24	13	24	482	equipments,
lucinties																									facilities
tompount buildings																									temporary
temporary buildings, establishments	196	174	194	206	211	195	181	172	167	154	157	141	188	169	156	129	147	145	156	196	183	157	176	3,950	buildings,
establishments																									establishments
hazards, harmful																									hazards,
substances	15	14	16	11	11	10	11	8	8	3	1	3	7	5	1	5	1	2	6	8	1	7	6	160	harmful
substances																									substances
materials	16	15	25	17	21	21	20	15	11	14	8	14	10	10	7	10	6	9	7	6	5	9	10	286	materials
load	66	50	61	47	56	39	48	38	44	40	23	38	31	29	25	29	19	27	24	32	29	29	42	866	load
	25	2.1	2.5	20		10	25	27	20	25		17	F.0	22		25		27	22	42	26	20	26	617	natural
natural environment	25	21	35	20	23	18	25	27	20	25	17	17	50	23	33	35	21	27	32	43	26	28	26	617	environment
-4h		1.4	12	10	14	10	12	_	8	1.2		_	10	10		10		6	7	10		7	18	214	other causal
other causal agent	11	14	12	10	14	10	13	7	8	12	5	1	10	10	11	10	4	0		10	4		18	214	agent
	20	20	26	27	24	20	25	24	22	20	10	10	27	26	22	21	25	22	22	27	2.1	2.1	20	627	no causal
no causal agent	38	30	26	37	24	20	25	24	32	29	19	19	37	36	22	31	25	22	32	27	21	31	30	637	agent
unclassifiable		3	2	7		3	2	2	4	1	2	1	3	2	2	1				2	1	1		39	unclassifiable
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Causal agents (small) of fatal and non-fatal accidents in fuel retail 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			2						1					1				1	1				1	7	engine

power transmission		4	4	1	3	2	2	1	2	2	1	4	2	1	3	1	1	1			35	power transmission
mechanism																						mechanism
circular sawing		1	1	1		2	1	1		1	2	1						1		1	13	circular sawing
machine																						machine
band sawing																						band sawing
machine																						machine
wood planer																						wood planer
machine																						machine
hollow chisel																						hollow chisel
mortiser, wood																						mortiser, wood
borer																						borer
chamfering																						chamfering
machine, router,																						machine, router,
woodworking																						woodworking
milling machine																						milling machine
chain saw		2				1							1							1	5	chain saw
other woodworking																						other woodworking
machines													2			1					4	machines
leveling,																						leveling,
transporting or		6	4	2	3	5	5	1	3	2	2	2	2	1	5	3	1	3	2	1	53	transporting or
loading machine																						loading machine
excavating machine		8	3	6	3	6	4	4	3	5	4	5	6	4	4	3	5	6	7	7	93	excavating machine
foundation work				1					1												2	foundation work
machine				I					I							1					3	machine
hardening machine		1					1	1													3	hardening machine

demolition machine		1	2	1											1				5	demolition machine
vehicle for high lift work																				vehicle for high lift work
other construction machines		1	1	1		1	1	2			1	1		1					10	other construction machines
lathe												1	1						2	lathe
drill press, milling machine																				drill press, milling machine
grinding machine, buffing machine		1	1	2	2		2	2		2	1	1		1	1		1		17	grinding machine, buffing machine
power press																				power press
forging pressure hammer																				forging pressure hammer
shearing machine																				shearing machine
other metal manufacturing machines		4	1	1	1	2		2	2		2		2	2	3	2	2	2	28	other metal manufacturing machines
centrifugal machine																1			1	centrifugal machine
mixer, grinder											1								1	mixer, grinder
roll machine (except printingroll machine)						1													1	roll machine (except printingroll machine)
injection molding machine																				injection molding machine

food manufacturing												1		1	1				1		4	food manufacturing
printing machine																						printing machine
industrial robot																						industrial robot
other general power machines		19	9	12	10	15	6	9	9	6	9	5	5	6	7	6	4	3	5	7	152	other general power machines
felling machine																						felling machine
mobile logging machine																						mobile logging
skyline yarding machine																						skyline yarding machine
other mobile silviculture machine																						other mobile silviculture machine
crane		1	1										1		1		1	1			6	crane
mobile crane		1		1		1				1	2						1	2		1	10	mobile crane
derrick crane																						derrick crane
elevator, lift		8	3	6	3	5	6	6			1	4	1	5	2	1	3		1	1	56	elevator, lift
cargo lifting appliance																1		1		1	3	cargo lifting appliance
gondola																						gondola
lumberyard equipment, logging cableway simple skyline																						lumberyard equipment, logging cableway simple skyline
Simple skyllic																						Simple skylline

yarding equipment																						yarding equipment
other powered crane				2	2	1	1	1	1	1	1			1		1		1	2	1	16	other powered crane
truck		81	75	67	61	64	50	48	41	47	56	42	48	52	47	53	49	60	53	52	1,046	truck
forklift		3	5	1	4	5	1	2	5	1	1	1	2	2	4		1	1	1	1	41	forklift
railway equipment																						railway equipment
conveyor			1	1	1	2	1	2		2			1	1		1	1	2	1		17	conveyor
loader			1		1										1				1		4	loader
straddle carrier					1																1	straddle carrier
rough terrain hauler							1								1						2	rough terrain hauler
other powered conveying machines		3	1	3	1	1	1			1	4		1	1	3	4	2	1	2	3	32	other powered conveying machines
cars, bus, motorcycle		98	95	93	61	68	66	69	67	63	60	53	51	55	45	39	47	44	33	42	1,149	cars, bus, motorcycle
railway vehicle																						railway vehicle
other vehicles		2	6	4	2	4	1	3	3	1	2	3	4	2	1	2	3	3	1	2	49	other vehicles
boiler																						boiler
pressure vessel		2					1				1		1		1	1					7	pressure vessel
other pressure vessels		13	7	6	6	10	3	3	5	4	6	6	5	6	7	5	3	4	2	9	110	other pressure vessels
chemical facilities		1		2	1							1	2	1		1					9	chemical facilities
gas welding equipment					2										1					1	4	gas welding equipment
arc welding																						arc welding

equipment												1									1	equipment
other welding equipment							2														2	other welding equipment
kiln, caldron			1				1														2	kiln, caldron
industrial dryer																						industrial dryer
other kiln, caldron																						other kiln, caldron
transmission																						transmission
electric power facilities									1									1			2	electric power facilities
other electrical equipment			1			1	1	1					2				2	1		1	10	other electrical equipment
human power cranes		4	2	4	4	2				1	2	1	1		1	1		1	1	1	26	human power cranes
human power hauling equipment		9	6	4	4	4	3	2	1	5	4	5	7	6	2	2	4	3	7	3	81	human power hauling equipment
human power machine		3	1	1		1		1	1			1		1		1	1	2		1	15	human power machine
hand tool		16	14	12	6	2	8	3	2	6		3	8	5	3	2	1	6	3	4	104	hand tool
ladder		37	39	42	36	38	50	36	37	41	31	40	39	38	46	42	54	51	51	61	809	ladder
slinging tool								1		1				2	1						5	slinging tool
other tools		16	8	12	16	10	19	18	10	11	18	13	11	12	18	15	10	13	13	19	262	other tools
other equipment,		17	20	14	21	35	26	15	15	17	21	22	22	17	14	19	22	24	13	24	378	other equipment,
scaffolding		1	2	2	2	1	1						1	1	1		1	1	1		15	scaffolding

								<u> </u>		<u> </u>					<u> </u>	<u> </u>		<u> </u>				1
timbering																						timbering
stairs, landing stage		15	26	23	23	16	23	17	15	16	15	20	8	16	10	23	22	21	19	18	346	stairs, landing stage
opening		5	2	6	1	6	2	4	4	4	2	4	8	5	1	7	3	1	3	4	72	opening
roof, beam, haze,		2	4	3	2	2	3		3	5	3	3	3		4	3	4	3	1	1		roof, beam, haze,
principal rafter																						principal rafter
working platform, boot board		42	39	30	29	27	28	24	20	28	21	25	16	13	16	21	20	25	16	20	460	working platform, boot board
passage		69	66	68	69	62	47	60	57	79	87	71	49	63	69	69	84	86	65	82	1,302	passage
building, establishment		44	43	30	30	38	28	40	29	37	28	22	32	28	30	23	49	29	32	32	624	building, establishment
other temporary buildings, establishments		16	29	19	16	15	22	12	13	19	13	11	12	21	14	10	13	17	20	19	311	other temporary buildings, establishments
explosive substance			1																		1	explosive substance
inflammable substance		2	3	4	4	5	1		2	3			1	1		3	3		2	2	36	inflammable substance
inflammable gas		2	4	5		2	1	1		1	1		2		1	1	3		1		25	inflammable gas
harmful substance		1			1				1	2		1			1	1			2		10	harmful substance
radiation																						radiation
other hazards, harmful substances		11	3	2	3	1	1			1	4		2			1	2	1	2	4	38	other hazards, harmful substances
metal material		10	10	10	6	3	7	4	5	3	3	2	5		6	4	3	3	5	4	93	metal material
lumber, bamboo		2	1		1				2	3	3									1	13	lumber, bamboo

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stone, sand, substance	1	I	3	1	2						2	1	2	1		1		1	2	1	18	stone, sand, substance
other materials	1	12	7	9	6	8	7	4	7	4	2	4	3	5	3	2	3	1	2	4	93	other materials
load	5	55	53	43	34	41	38	20	34	28	24	24	27	17	26	22	31	23	28	36	604	load
machine/equipment as load	6	5	3	5	4	3	2	3	4	3	5	1	2	2	1	2	1	6	1	6	60	machine/equipment as load
natural ground,	7	7	4	6	1	3	1	1	1	2	2	5	1	4	2	2	2	2	2		48	natural ground, rock
standing tree					1	1	1		1				1	1	2		1	1	2		12	standing tree
water	1	1	2	2		2	1			26						1		1	1		37	water
abnormal environment											1	1									2	abnormal environment
high/cold temperature environment	4	1	3	2	3	2	3	2	3	3	4	4	2	3		1	6	4	4	7	60	high/cold temperature environment
other environments	2	23	14	15	22	12	19	14	12	19	16	23	31	13	23	28	34	18	19	19	374	other environments
other causal agent	1	12	14	13	7	8	12	5	1	10	10	11	10	4	6	7	10	4	7	18	169	other causal agent
no causal agent	2	26	24	25	24	32	29	19	19	37	36	22	31	25	22	32	27	21	31	30	512	no causal agent
unclassifiable	2	2		2	2	4	1	2	1	3	2	2	1				2	1	1		26	unclassifiable
total	7	736	673	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	10,106	total

Workers age of fatal and non-fatal accidents in fuel retail in 1999-2021

	1000	000 20	200	2 2002	2004	2005	2006 20	200	2000	2010	2011	2012	2012	2014	2015	2016	2017	2010	2010	2020	2021			
Age	1999 2	000 20	001 200	2 2003	2004	2005	2006 20	007 200	8 2009	/ () ()	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	totai	Age	

19 years old or less	60	46	44	56	49	34	35	24	38	24	21	14	16	16	10	13	13	18	11	18	11	14	12	597	19 years old or less
20-29	243	211	237	197	207	192	178	142	117	106	108	88	88	103	96	85	59	69	62	62	65	56	70	2,841	20-29
30-39	145	115	160	125	124	128	145	117	136	126	106	108	132	115	96	107	93	85	75	94	82	60	74	2,548	30-39
40-49	133	116	122	123	114	111	97	94	111	86	74	66	114	108	104	107	111	113	91	118	112	103	126	2,454	40-49
50-59	140	128	139	129	131	127	134	105	116	123	95	95	115	96	92	95	88	98	107	126	124	120	130	2,653	50-59
60 years old or more	39	34	34	58	48	49	39	66	66	77	62	72	92	75	78	71	82	79	130	126	115	116	144		60 years old or more
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Workers' number of workplace of fatal and non-fatal accidents in fuel retail 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	313	272	352	326	319	283	314	248	290	240	221	197	253	219	236	194	205	238	219	269	200	204	232	5,844	9 workers or less
10-29	255	227	221	218	219	221	179	178	170	200	165	164	190	197	155	185	152	165	175	197	198	194	231	4,456	10-29
30-49	63	57	58	62	59	66	54	55	45	43	33	36	49	41	35	44	39	24	35	40	45	27	52	1,062	30-49
50-99	66	62	56	47	43	44	46	35	42	34	21	24	33	33	30	35	30	24	20	19	28	20	26	818	50-99
100-299	60	22	41	25	24	20	23	24	28	22	23	20	26	17	18	16	14	9	23	17	35	21	11	539	100-299
300 workers or	3	10	8	10	9	7	12	8	9	3	3	2	6	6	2	4	6	2	4	2	3	3	4	126	300 workers or
more																								ll l	more
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Month of fatal and non-fatal accidents in fuel retail in 1999-2021

January	87	71	81	72	64	67	53	85	54	73	55	42	72	48	65	71	46	55	41	60	66	48	74	1,450	January
January	07	/ '	01	/ 2	Γ	07		0.5	77	,,,		72	, ,	70	05	, ,	10		T	00		10	, ,	1,750	January
February	82	69	68	68	60	59	63	50	54	69	43	51	40	54	46	57	41	42	53	66	43	41	56	1,275	February
March	52	67	55	65	70	66	59	45	57	40	48	50	82	42	48	42	49	45	38	48	50	34	53	1,205	March
April	74	42	48	58	55	55	56	42	55	43	31	32	42	47	37	27	40	34	35	43	39	41	27	1,003	April
May	62	54	74	61	59	45	39	46	50	39	37	21	31	36	22	33	33	27	37	41	30	30	34	941	May
June	59	49	52	54	45	56	50	33	54	25	38	39	35	34	32	38	36	30	29	44	29	35	47	943	June
July	66	46	58	55	63	41	43	33	51	50	41	33	45	43	42	29	32	31	39	38	40	26	48	993	July
August	52	43	67	43	47	44	48	44	48	38	38	31	48	37	25	38	25	40	27	31	35	48	55	952	August
September	51	51	40	46	41	63	55	39	32	41	24	24	36	37	32	26	36	26	34	49	51	38	25	897	September
October	52	47	59	50	57	56	46	31	51	37	41	43	30	33	43	29	36	31	49	47	37	27	48	980	October
November	47	64	62	63	54	47	43	47	40	41	26	35	38	50	47	42	30	41	45	34	44	39	33	1,012	November
December	76	47	72	53	58	42	73	53	38	46	44	42	58	52	37	46	42	60	49	43	45	62	56	1,194	December
total	760	650	736	688	673	641	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	12,845	total

Prefecture of fatal and non-fatal accidents in fuel retail 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	50	51	60		46		57	45	37	44	29	27	41	23	27	40	25	31	32	44	42	45	44	840	Hokkaido
Aomori	17	9	13		12		14	13	14	4	8	7	16	16	15	14	7	16	18	8	12	7	6	246	Aomori
lwate	16	14	12		13		11	11	12	10	12	6	18	8	14	9	6	15	13	8	12	5	14	239	lwate
Miyagi	21	13	11		19		14	15	16	16	14	16	33	25	13	12	17	19	10	15	15	18	13	345	Miyagi
Akita	13	13	13		6		9	14	8	3	10	9	11	14	7	9	6	9	6	11	10	7	7	195	Akita
Yamagata	16	10	13		10		10	14	13	15	9	11	13	12	8	8	13	7	7	16	8	12	13	238	Yamagata

Fukushima	13	15	13	16	11	12	11	17	12	18	13	15	15	8	7	16	14	10	16	19	14	285	Fukushima
Ibaraki	28	17	7	20	15	12	15	11	13	10	11	13	9	12	16	13	14	12	9	11	7	275	Ibaraki
Tochigi	16	13	9	8	18	8	11	10	3	6	11	11	5	10	9	5	9	12	16	12	17	219	Tochigi
Gunma	15	8	11	19	14	10	9	14	13	8	9	8	8	10	10	8	7	12	9	12	14	228	Gunma
Saitama	16	11	26	27	14	15	14	11	9	16	14	18	18	23	21	17	11	19	20	10	18	348	Saitama
Chiba	28	26	27	23	10	16	22	20	16	14	19	16	18	19	15	15	22	13	15	12	24	390	Chiba
Tokyo	24	27	34	30	21	19	18	25	13	17	24	21	16	19	22	18	18	19	22	9	21	437	Tokyo
Kanagawa	54	41	35	22	33	37	22	33	22	29	28	32	17	13	19	21	25	23	21	23	23	573	Kanagawa
Niigata	15	12	13	11	14	11	22	14	14	12	18	9	13	11	15	10	17	15	14	6	14	280	Niigata
Toyama	6	11	10	5	5	6	1	7	10	3	6	9	10	2	6	4	3	2	8	8	4	126	Toyama
Ishikawa	12	1	2	6	6	7	7	8	9	6	4		8	9	8	3	8	7	9	6	9	135	Ishikawa
Fukui	3	3	14	5	3	5	2	4	7	3	6	8	1	4	4	6	3	5	6	4	2	98	Fukui
Yamanashi	1	1	4	2	3	3	6	4	2	1	3	3	1	3	2	5	7	6	8	2	3	70	Yamanashi
Nagano	14	10	12	15	18	16	21	14	12	15	14	10	12	13	13	15	10	15	15	19	28	311	Nagano
Gifu	18	10	22	15	18	16	12	13	7	12	12	9	9	15	9	9	14	12	10	10	13	265	Gifu
Shizuoka	20	17	10	20	18	11	26	18	13	8	16	16	18	16	12	19	13	26	22	18	18	355	Shizuoka
Aichi	33	37	27	18	27	25	28	23	26	24	18	29	21	26	19	22	18	28	23	33	22	527	Aichi
Mie	20	17	20	12	9	14	18	9	8	6	13	12	7	7	8	7	10	5	6	10	11	229	Mie
Shiga	3	7	12	6	8	8	6	4	8	5	5	8	5	8	7	6	2	3	2	4	2	119	Shiga
Kyoto	11	13	14	7	9	8	3	9	8	14	12	11	8	6	13	6	7	8	7	6	9	189	Kyoto
Osaka	30	18	32	19	23	15	24	20	8	17	8	11	7	17	10	13	10	20	12	12	16	342	Osaka
Hyogo	19	31	37	35	21	21	26	18	9	16	17	16	10	14	15	10	15	16	14	4	10	374	Hyogo
Nara	8	7	5	4	8	2	5	7	3	3	1	7	3	2	1	6	4	5	3	4	3	91	Nara

Wakayama	9	6	9	11	8	6	8	7	8		6	3	2	7	2	3	3	5	3	1	5	112	Wakayama
Tottori	7	4	7	4	5	1	4	4	1	3	2	3	6	5	6	3	5	1	7	4	2	84	Tottori
Shimane	8	7	12	7	4	2	6	1	3	3	5	4	10	3	4		7	6	5	9	8	114	Shimane
Okayama	15	12	12	7	11	14	8	11	7	10	14	6	17	7	10	8	7	15	9	11	10	221	Okayama
Hiroshima	30	21	30	24	24	10	22	11	20	10	20	15	17	10	11	8	17	20	20	11	14	365	Hiroshima
Yamaguchi	14	7	19	15	11	15	3	4	8	5	7	5	7	2	8	8	5	12	6	7	11	179	Yamaguchi
Tokushima	5	3	3	3	5	1	5	4	1		2	5	3	2	3	2		4	2	1	5	59	Tokushima
Kagawa	13	12	10	13	9	4	5	8	10	6	11	8	8	4	5	6	3	2	3	4	4	148	Kagawa
Ehime	10	12	9	21	11	6	9	9	9	6	11	8	11	7	5	5	7	11	9	7	11	194	Ehime
Kochi	8	8	7	11	6	5	3	3	3	2	4	3	1	2	2	6	3	3	4	2	3	89	Kochi
Fukuoka	35	37	40	35	31	25	18	18	22	19	19	21	21	22	19	15	21	19	16	22	30	505	Fukuoka
Saga	13	6	6	8	5	4	11	8	5	5	7	8	5	2	6	8	10	4	10	7	7	145	Saga
Nagasaki	7	8	10	12	8	5	6	6	5	3	5	6	8	6	3	3	1	10	3	11	9	135	Nagasaki
Kumamoto	12	8	12	8	12	5	5	6	7	6	10	2	4	5	3	13	11	6	3	7	5	150	Kumamoto
Oita	13	12	8	9	7	9	14	8	2	8	4	7	4	7	6	5	7	6	7	5	10	158	Oita
Miyazaki	8	9	8	10	6	6	10	5	10	4	3	4	3	6	8	8	9	6	7	3	6	139	Miyazaki
Kagoshima	10	9	11	18	18	13	10	15	12	11	12	9	15	15	10	5	10	14	4	6	12	239	Kagoshima
Okinawa	3	6	5	6	6	8	8	9	6	3	1	6	11	7		5	3	5	5	3	5	111	Okinawa
total	760	650	736	673	628	548	584	542	466	443	557	513	476	478	446	462	476	544	509	469	556	11,516	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 fuel retail in Japan in 1999-2021

fuel retail industry Code No.080204

Type of fatal accidents in fuel retail 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		1	2	1			1	1	2		1	2		1	1		1	2	1	20	fall from height
falling to same level			1				1														1			3	falling to same level
crash											1													1	crash
struck by flying or falling object		1					2																	3	struck by flying or falling object
collapse																									collapse
crashed by	1	1	1					1	1											1 1	1	1		8	crashed by
caught in/between	2	2	3				1	2	2		2	2	1			1				2 1	1		1	22	caught in/between
cut									1															1	cut
injury to the sole of the																									injury to the sole of the foot
drown											1		18									1		20	drown

contact to high/low-																									contact to
temperature																									high/low-
temperature																									temperature
contact to harmful																									contact to
substance	1		1	1																				3	harmful
substance																									substance
electric shock																									electric shock
explosion	1																							1	explosion
burst															1	1		1						3	burst
fire													2											2	fire
traffic accident (public	6	7	9	2	2	1	6	5	1	2	2	1	1	1	1		2	2	3	1		1		56	traffic accident
road)	0		9	2	2		0	5		2	2	1	1					2	3					30	(public road)
turaffic a caid and (ath ana)																								1	traffic accident
traffic accident (others)																								I	(others)
reaction to																									reaction to
motion/improper																									motion/improper
motion																									motion
others										1		1	8				1			1				12	others
unclassifiable						1						1												2	unclassifiable
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

Causal agents (large) of fatal accidents in fuel retail in 1999-2021

																									Causal (L)	
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		

																									agents
machine		1	3					1	1			1	1			1								9	machine
crane, conveying machine	9	8	10	4	2	1	7	7	4	2	5	2	1	1	1	1	2	3	3	4	3	1	1	82	crane, conveying machine
other equipment		2	2			1					1		1		1	2			1			1	1	13	other equipment
temporary buildings, establishments			1				2	1			1	1	1		1			1			1	1		11	temporary buildings, establishments
substance, material	2		1	1			1																	5	substance, material
load							1																	1	load
environment							1			1			28									2		32	environment
others						1						2					1			1				5	others
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

Causal agents (middle) of fatal accidents in fuel retail 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

	 	1	 						<u> </u>				<u> </u>	<u> </u>				<u> </u>	 		<u> </u>	<u> </u>		<u> </u>	
woodworking machine									1															1	woodworking machine
construction machine			1					1								1								3	construction machine
metal manufacturing machine																									metal manufacturing machine
general machine		1	2									1	1											5	general machine
mobile silviculture machine																									mobile silviculture machine
crane									1															1	crane
conveying machine	5	6	4	2	2	1	3	2	1	1	4	1		1	1	1	1	2	1	2	2		1	44	conveying machine
vehicle	4	2	6	2			4	5	2	1	1	1	1				1	1	2	2	1	1		37	vehicle
pressure vessel																									pressure vessel
chemical facilities																									chemical facilities
welding equipment																									welding equipment
kiln, caldron																									kiln, caldron
electric equipment																									electric equipment

human power machine,		1																						1	human power
tools		<u> </u>																							machine, tools
tools			2			1					1		1			2			1			1	1	10	tools
other equipments,		1													1									2	other equipments, facilities
temporary buildings, establishments			1				2	1			1	1	1		1			1			1	1		11	temporary buildings, establishments
hazards, harmful substances	2		1	1																				4	hazards, harmful substances
materials							1																	1	materials
load							1																	1	load
natural environment							1			1			28									2		32	natural environment
other causal agent																									other causal agent
no causal agent												1					1			1				3	no causal agent
unclassifiable						1						1												2	unclassifiable
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

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									1															1	chain saw
other woodworking machines																									other woodworking machines
leveling, transporting or loading machine								1								1									leveling, transporting or loading machine
excavating machine																									excavating machine

foundation work														foundation work
hardening machine														hardening machine
demolition machine		1											1	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)														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	1	2					1	1						5	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					1									1	elevator, lift
cargo lifting appliance															cargo lifting appliance
gondola															gondola
lumberyard															lumberyard

equipment, logging cableway																									equipment, logging cableway
simple skyline yarding equipment																									simple skyline yarding equipment
other powered crane																									other powered crane
truck	5	6	4	2	2	1	3	1	1	1	4	1		1	1	1	1	2	1	2	2		1	43	truck
forklift																									forklift
railway equipment																									railway equipment
conveyor																									conveyor
loader																									loader
straddle carrier								1																1	straddle carrier
rough terrain hauler																									rough terrain hauler
other powered conveying machines																									other powered conveying machines
cars, bus, motorcycle	4	2	6	2			4	5	2	1		1	1				1	1	2	2	1	1		36	cars, bus, motorcycle
railway vehicle																									railway vehicle
other vehicles											1													1	other vehicles
boiler																									boiler
pressure vessel																									pressure vessel
other pressure vessels																									other pressure vessels
chemical facilities																									chemical facilities

1-	 					 							 	 			 			
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 cranes																				human power
numan power cranes																				cranes
human power																				human power
hauling equipment																				hauling equipment
human power	1																		1	human power
machine																				machine
hand tool																				hand tool
ladder		2			1				1		1		1		1		1	1	9	ladder
slinging tool																				slinging tool
other tools													1						1	other tools
Ir-	 	$\overline{}$	$\overline{}$	$\overline{}$		 	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	-	 $\overline{}$	 		$\overline{}$	 			

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

harmful substances																									harmful substances
metal material							1																	1	metal material
lumber, bamboo																									lumber, bamboo
stone, sand,																									stone, sand,
other materials																									other materials
load							1																	1	load
machine/equipment																									machine/equipment
as load																									as load
natural ground, rock																									natural ground,
																									rock
standing tree																									standing tree
water													26									1		27	water
abnormal																									abnormal
environment																									environment
high/cold																									high/cold
temperature																									temperature
environment																									environment
other environments							1			1			2									1		5	other environments
other causal agent																									other causal agent
no causal agent												1					1			1				3	no causal agent
unclassifiable						1						1												2	unclassifiable
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

Workers age of fatal accidents in fuel retail 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	5	1	3	1			1						1											12	19 years old or less
20-29	1	3	5				3	4	2		2	2	1	1	1									25	20-29
30-39		3	2	2		1	2		2				10					1						23	30-39
40-49	3	2	1		1	1		1	1		2		10		2	1		1		1				27	40-49
50-59	2	2	3	2	1	1	5	3		1	3	2	5			3	2	1	2	1	2	1	2	44	50-59
60 years old or more			3				1	1		2		2	5				1	1	2	3	2	4		27	60 years old or more
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

Workers' number of workplace of fatal accidents in fuel retail 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	4	7	7	3	1	1	8	7	2	2	6	4	22	1	1	4	1	4	2	3	4	4	1	99	9 workers or less
10-29	5	3	7	2	1	1	4	1	3	1	1	1	6		2		1		1	2		1		43	10-29
30-49	1	1	2			1		1					1				1		1				1	10	30-49
50-99	1		1																					2	50-99
100-299												1	3											4	100-299
300 workers or more																									300 workers or more
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	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	2	2	3				2		2		2							1			1		1	16	January
February	2	2	2				2					2			1		1	1		1	1	2		17	February
March		1	1	1	1			1			1		28		1	1			1	1				38	March
April	2		1																					3	April
May	1		1			1	1	1										1			1	1		8	May
June			1				2		1			1			1		2			1				9	June
July	1					1						1	1									1		5	July
August			2				1	1		1		1	1			1			1					9	August
September	1	3	1	2				2		1	1	1	1							1		1		15	September
October		2	3				1	2	1		1					1			2					13	October
November	2				1	1	1	1	1									1		1	1			10	November
December		1	2	2			2	1		1	2		1	1		1							1	15	December
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

Prefecture of fatal accidents in fuel retail 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		3	1	1											1	1		1					1	9	Hokkaido
Aomori																		1						1	Aomori
lwate						1							8		1	1		1	1					13	lwate
Miyagi			1										19										1	21	Miyagi
Akita													1											1	Akita

Yamagata	1												1					1	1			4	Yamagata
Fukushima													2								1	3	Fukushima
Ibaraki	1			1			1	1			1											5	Ibaraki
Tochigi								1		1												2	Tochigi
Gunma	1																			1		2	Gunma
Saitama		1	1					1				1										4	Saitama
Chiba			1				1														1	3	Chiba
Tokyo		1	1							1	1					1			1			6	Tokyo
Kanagawa			2				1															3	Kanagawa
Niigata							1															1	Niigata
Toyama																							Toyama
Ishikawa										1												1	Ishikawa
Fukui		1									1									2		4	Fukui
Yamanashi																							Yamanashi
Nagano		1			1		1						1									4	Nagano
Gifu		1	1	1													1		2	1		7	Gifu
Shizuoka			2					1								1		1	1			6	Shizuoka
Aichi	1	1	1	1		2		1				1										8	Aichi
Mie			1		1																	2	Mie
Shiga		1	1				1								1							4	Shiga
Kyoto	1																					1	Kyoto
Osaka	1	1					2	1	2									1				8	Osaka
Hyogo			1				1				1	1										4	Hyogo
		1	1	$\overline{}$		=						1								1		1	i

Nara																									Nara
Wakayama									2															2	Wakayama
Tottori							1					1												2	Tottori
Shimane	1																1							2	Shimane
Okayama			1									1										1		3	Okayama
Hiroshima	1										1													2	Hiroshima
Yamaguchi								2																2	Yamaguchi
Tokushima									1															1	Tokushima
Kagawa							1								1									2	Kagawa
Ehime																									Ehime
Kochi																									Kochi
Fukuoka	1		1																					2	Fukuoka
Saga																						1		1	Saga
Nagasaki				1																				1	Nagasaki
Kumamoto			1																					1	Kumamoto
Oita	1							1						1										3	Oita
Miyazaki	1										1													2	Miyazaki
Kagoshima							1				1					1						1		4	Kagoshima
Okinawa												1												1	Okinawa
total	11	11	17	5	2	3	12	9	5	3	7	6	32	1	3	4	3	4	4	5	4	5	2	158	total

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

