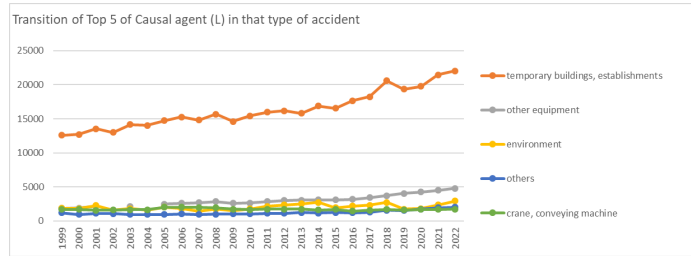
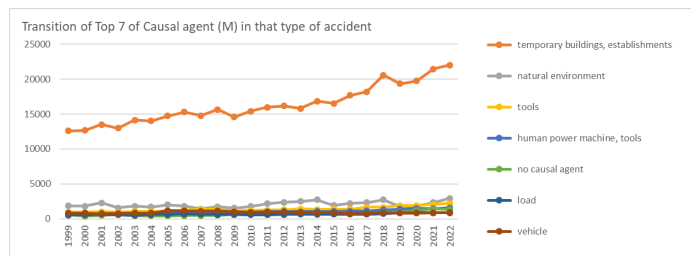


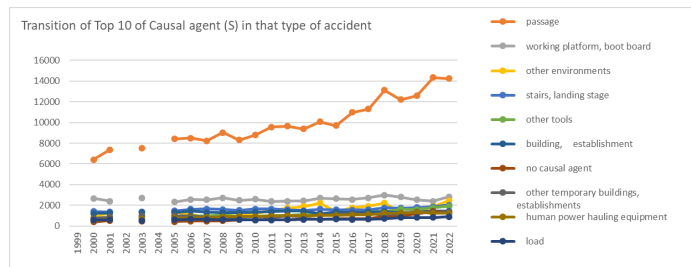
Transition of Causal agent (L, M, S) of fatal & non-fatal accident (falling to same level) in 1999-2022



Transition of Causal agent (L) of fatal & non-fatal accident (falling to same level) in 1999-2022



Transition of Causal agent (M) of fatal & non-fatal accident (falling to same level) in 1999-2022



Transition of Causal agent (S) of fatal & non-fatal accident (falling to same level) in 1999-2022

Transition of Causal agent (L) of fatal & non-fatal accident (falling to same level) in 1999-2022

Causal agent (L)	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
temporary buildings, establishments,	12,590	12,695	13,516	12,977	14,146	14,046	14,733	15,282	14,795	15,677	14,602	15,438	15,970	16,170	15,817	16,858	16,539	17,668	18,217	20,570	19,343	19,764	21,459	22,020	390,892

establishments																										
other equipment	1,878	1,920	2,138		2,146		2,466	2,604	2,691	2,852	2,601	2,663	2,857	3,021	3,050	3,096	3,079	3,169	3,419	3,704	4,043	4,235	4,513	4,804	66,949	
environment	1,870	1,832	2,286	1,579	1,817	1,579	2,037	1,813	1,412	1,747	1,544	1,777	2,169	2,367	2,501	2,729	1,925	2,208	2,329	2,722	1,745	1,834	2,345	2,945	49,112	
others	1,201	966	1,113	1,064	964	933	959	1,042	948	981	1,047	1,044	1,133	1,103	1,239	1,145	1,238	1,218	1,292	1,564	1,549	1,738	1,958	2,028	29,467	
crane, conveying machine	1,686	1,679	1,583	1,627	1,656	1,641	2,021	2,012	1,983	1,935	1,735	1,648	1,744	1,751	1,740	1,625	1,679	1,450	1,564	1,684	1,620	1,711	1,712	1,734	41,220	
load	558	605	666	607	529	607	637	693	668	644	646	589	602	646	654	666	676	651	677	742	862	848	850	922	16,245	
substance, material	1,141	1,111	1,027	1,067	963	976	847	860	920	722	636	596	657	708	689	672	630	552	621	637	602	600	634	644	18,512	
machine	304	297	262		253		263	243	232	234	191	203	173	208	188	191	183	236	191	210	222	199	201	198	4,882	
total	21,228	21,105	22,591	21,204	22,474	22,456	23,963	24,549	23,649	24,792	23,002	23,958	25,305	25,974	25,878	26,982	25,949	27,152	28,310	31,833	29,986	30,929	33,672	35,295	622,236	

Transition of Causal agent (M) of fatal & non-fatal accident (falling to same level) in 1999-2022

Causal agent (M)	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
temporary buildings, establishments	12,590	12,695	13,516	12,977	14,146	14,046	14,733	15,282	14,795	15,677	14,602	15,438	15,970	16,170	15,817	16,858	16,539	17,668	18,217	20,570	19,343	19,764	21,459	22,020	390,892
natural environment	1,870	1,832	2,286	1,579	1,817	1,714	2,037	1,813	1,412	1,747	1,544	1,777	2,169	2,367	2,501	2,729	1,925	2,208	2,329	2,722	1,745	1,834	2,345	2,945	49,247
tools	928	964	1,012	951	1,082	1,083	1,148	1,277	1,325	1,336	1,113	1,169	1,279	1,317	1,420	1,361	1,379	1,398	1,666	1,648	1,900	1,895	2,059	2,220	32,930
human power machine, tools	574	599	740	693	746	805	836	868	889	961	994	959	1,034	1,072	1,042	1,069	1,066	1,124	1,139	1,320	1,370	1,522	1,468	1,566	24,456
no causal agent	550	389	519	630	482	420	416	475	476	510	616	581	641	616	718	626	710	684	703	983	979	1,208	1,424	1,342	16,698

load	558	605	666	607	529	620	637	693	668	644	646	589	602	646	654	666	676	651	677	742	862	848	850	922	16,258
vehicle	808	813	745	793	811	836	1,184	1,161	1,111	1,133	1,039	939	983	970	934	885	879	758	802	903	836	827	886	868	21,904
other equipments, facilities	294	291	303	304	267	322	404	376	396	453	405	464	458	529	503	577	523	533	486	584	622	683	807	831	11,415
conveying machine	807	797	767	762	781	746	768	776	791	723	640	663	719	728	743	689	754	653	713	729	729	819	771	811	17,879
other causal agents	550	508	520	360	413	454	486	505	408	404	362	397	442	423	478	468	487	492	538	512	545	500	503	658	11,413
materials	1,134	1,101	1,017	1,061	953	964	838	851	914	709	630	594	648	694	681	663	620	542	612	626	594	596	625	634	18,301
electric equipment	63	51	68	51	36	69	63	57	62	79	70	59	71	90	74	76	98	102	119	137	136	123	162	168	2,084
construction machine	143	142	107	110	108	105	122	107	99	103	93	89	78	100	86	75	80	107	86	82	89	84	85	88	2,368
general machine	108	107	101	127	109	87	108	100	98	99	74	89	75	92	79	88	75	98	80	98	106	96	85	82	2,261
crane	71	69	71	72	64	59	69	75	81	79	56	46	42	53	63	51	46	39	49	52	55	65	55	55	1,437
unclassifiable	101	69	74	74	69	59	57	62	64	67	69	66	50	64	43	51	41	42	51	69	25	30	31	28	1,356
metal manufacturing machine	28	21	30	19	17	20	17	20	20	14	10	14	9	5	17	16	12	15	9	9	15	13	16	14	380
hazards, harmful substances	7	10	10	6	10	12	9	9	6	13	6	2	9	14	8	9	10	10	9	11	8	4	9	10	211
welding equipment	5	7	8	4	4	6	8	9	12	6	9	1	3	2	2	1	6	6	3	5	5	4	5	7	128
kiln, caldron	7	1	4	3	4	2	2	3	1	7	5	6	4	2	6	6	3		3	3	2	6	5	6	91

mobile silviculture machine																	5	8	5	6	3	3	5	6	41
woodworking machine	21	21	24	10	16	9	13	14	14	15	12	9	10	7	3	10	6	4	9	9	6	2	7	4	255
chemical facilities	2			5	4	6	1	5		3	2	1	2	2		2	2	1	2	2	3			4	49
power transmission mechanism	4	4		1	2	7	1	1	1		1	1		2	2	1	3	2	2	3	1	1	1	3	44
pressure vessel	5	7	3	4	3	3	4	9	6	7	3	4	6	7	3	4	2	5	1	5	5	2	7	2	107
engine		2		1	1	2	2	1		3	1	1	1	2	1	1	2	2		3	2		2	1	31

Transition of Causal agent (S) of fatal & non-fatal accident (falling to same level) in 1999-2022

Causal agent (S)	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
passage		6,407	7,369		7,541		8,428	8,496	8,237	9,033	8,306	8,794	9,556	9,652	9,371	10,067	9,686	10,971	11,290	13,126	12,199	12,584	14,351	14,245	209,709
working platform, boot board		2,659	2,403		2,692		2,326	2,551	2,542	2,735	2,488	2,580	2,384	2,404	2,437	2,701	2,646	2,556	2,736	3,003	2,793	2,546	2,399	2,824	54,405
other environments		908	1,289		972		1,327	1,129	792	1,081	999	1,199	1,529	1,734	1,896	2,210	1,426	1,770	1,909	2,216	1,275	1,370	1,899	2,444	31,374
stairs, landing stage		1,403	1,370		1,376		1,479	1,624	1,647	1,595	1,513	1,642	1,646	1,563	1,490	1,623	1,578	1,535	1,564	1,756	1,724	1,778	1,874	2,035	33,815
other tools		699	740		832		897	987	990	1,064	903	927	1,013	1,042	1,138	1,091	1,106	1,162	1,383	1,395	1,633	1,593	1,774	1,925	24,294
building, establishment		1,237	1,261		1,310		1,304	1,464	1,330	1,311	1,289	1,364	1,393	1,429	1,446	1,212	1,373	1,286	1,355	1,424	1,278	1,328	1,431	1,443	28,268
no causal agent		389	519		482		416	475	476	510	616	581	641	616	718	626	710	684	703	983	979	1,208	1,424	1,342	15,098
other temporary buildings, establishments		753	867		1,022		979	958	848	836	877	913	846	979	926	1,077	1,122	1,167	1,138	1,107	1,210	1,398	1,263	1,322	21,608
human power hauling equipment		524	679		664		776	794	824	897	933	911	962	1,017	982	1,012	1,018	1,073	1,089	1,248	1,248	1,342	1,231	1,232	20,456
load		579	614		508		605	661	633	619	612	573	584	620	628	640	652	636	660	722	832	828	827	904	13,937

other equipments, facilities		291	303		267		404	376	396	453	405	464	458	529	503	577	523	533	486	584	622	683	807	831	10,495
cars, bus, motorcycle		522	533		589		956	944	892	918	835	759	792	785	784	720	721	624	664	776	724	705	759	721	15,723
other causal agents		508	520		413		486	505	408	404	362	397	442	423	478	468	487	492	538	512	545	500	503	658	10,049
truck		545	520		539		527	530	545	484	437	481	505	499	525	491	538	471	555	503	510	584	538	560	10,887
ladder		254	252		235		238	274	322	261	203	238	258	265	271	262	264	224	275	249	262	292	277	288	5,464
human power cranes		4	3		3		2	3	5	5	2	2	4	1		5	1	2	5	13	80	119	189	274	722
natural ground, rock		646	549		554		431	405	415	429	333	355	362	342	312	280	327	236	218	246	280	250	244	256	7,470
metal material		408	436		406		352	345	371	282	265	236	245	264	258	268	222	228	259	242	232	207	250	238	6,014
other materials		236	195		183		179	220	203	162	164	171	195	200	193	171	205	147	154	182	181	192	200	203	3,936
transmission		40	52		31		42	41	44	62	56	44	52	77	55	64	77	81	96	112	110	91	130	150	1,507
other vehicles		282	206		214		222	210	215	207	192	172	183	180	142	152	149	121	127	118	106	111	119	138	3,566
forklift		118	91		115		102	102	118	108	95	82	117	118	106	95	107	88	73	113	102	119	122	137	2,228
lumber, bamboo		350	284		292		237	231	267	199	165	139	152	181	169	168	152	124	144	143	118	140	113	129	3,897
standing tree		145	160		135		121	86	95	94	104	94	111	102	109	70	93	87	82	82	76	88	88	98	2,120
high/cold temperature environment		62	187		68		55	76	27	63	32	51	96	85	78	68	31	36	62	80	53	32	39	86	1,367
conveyor		70	84		59		79	86	82	85	66	68	55	62	64	62	70	59	51	67	77	72	82	81	1,481
other general power machines		92	86		92		87	88	69	80	56	71	63	63	67	66	64	83	57	70	83	74	75	65	1,551
stone, sand, substance		107	102		72		70	55	73	66	36	48	56	49	61	56	41	43	55	59	63	57	62	64	1,295
scaffolding		82	107		75		89	82	85	85	56	61	59	67	60	68	57	68	55	64	64	45	63	58	1,450
water		69	83		76		100	113	77	75	70	65	54	78	88	97	47	77	50	82	56	93	74	55	1,579
hand tool		53	48		74		48	65	48	52	53	39	55	47	54	45	44	41	41	52	37	48	40	53	1,037
roof, beam, haze, crossbeam, principal rafter		91	67		71		74	58	54	51	39	50	46	48	40	61	38	43	30	50	41	45	44	50	1,091
excavating machine		73	55		62		62	46	53	55	43	45	34	52	47	44	45	55	42	40	48	46	46	45	1,038
opening		49	51		43		33	32	33	24	30	27	33	22	35	41	31	31	40	35	34	35	24	33	716

unclassifiable		69	74		69		57	62	64	67	69	66	50	64	43	51	41	42	51	69	25	30	31	28	1,122
other powered conveying machines		49	63		56		54	48	38	41	36	31	39	40	38	37	30	32	30	36	29	35	25	24	811
mobile crane		37	35		27		35	37	37	34	25	24	18	25	31	23	23	22	24	20	13	22	16	24	552
leveling, transporting or loading machine		26	24		18		22	28	21	19	20	13	18	23	13	7	11	12	19	24	16	16	15	19	384
machine/equipment as load		26	52		21		32	32	35	25	34	16	18	26	26	26	24	15	17	20	30	20	23	18	536
other electrical equipment		11	16		3		19	14	17	15	13	15	18	12	19	12	19	21	20	24	24	32	31	16	371
elevator, lift		16	12		13		10	12	21	21	19	7	10	14	15	9	13	6	18	16	20	21	23	14	310
crane		10	15		15		17	14	17	17	6	10	7	8	10	13	6	9	3	9	14	13	9	14	236
food manufacturing machine		7	9		7		11	9	12	12	7	6	7	16	6	10	6	7	15	16	16	8	8	11	206
timbering		14	21		16		21	17	19	7	4	7	7	6	12	8	8	11	9	5		5	10	10	217
vehicle for high lift work		15	4		3		12	9	10	8	11	8	9	5	4	6	7	15	11	3	13	9	9	10	181
other metal manufacturing machines		14	22		11		6	12	10	7	6	9	5	3	13	8	7	7	7	5	4	8	12	9	185
railway vehicle		9	6		8		6	7	4	8	12	8	8	5	8	13	9	13	11	9	6	11	8	9	178
other construction machines		14	15		12		22	12	9	15	5	15	12	12	14	11	7	14	3	5	7	6	11	8	229
slinging tool		11	20		15		13	16	13	11	7	4	8	10	11	8	9	12	8	4	5	10	8	7	210
human power machine		18	10		5		10	6	12	7	6	7	13	7	6	7	3	8	4	7	5	13	8	7	169
other hazards, harmful substances		6	6		3		5	4	3	8	5		8	10	6	4	8	9	7	9	8	3	1	7	120
abnormal environment		2	18		12		3	4	6	5	6	13	17	26	18	4	1	2	8	16	5	1	1	6	174
demolition machine		5	1		1			1	1	1	3	2	2	2	5	3	7	6	6	4	4	2	2	5	63
loader		6	4		6		2	5	4	2	3	1	1	5	3	1	3	2	1	3	5	3	1	4	65
kiln, caldron		1	3		3		2	3	1	3	3	5	3	1	4	3	3			2	1	5	4	4	54
chemical facilities					4		1	5		3	2	1	2	2		2	2	1	2	2	3			4	36
other powered crane		4	6		6		5	11	4	6	4	3	6	2	6	2	3	2	4	5	7	8	4	3	101

arc welding equipment		2	3		1		5	5	5	5	7		1	1	1		5	4	1	1	3	3	3	3	59
rough terrain hauler		2	5		2		3	2	2	2	1		1	2	2	1	2		3	4	3	2	1	3	43
power transmission mechanism		4			2		1	1	1		1	1		2	2	1	3	2	2	3	1	1	1	3	32
other welding equipment		1	2						2	1				1	1		1	2	1	2	1		2	3	20
other woodworking machines		10	13		5		4	7	11	5	5	4	5	6	2	4	2	3	3	6	1	2	4	2	104
other pressure vessels		6	2		2		3	2	5	5	3	2	6	4	3	4	2	4	1	2	3	1	6	2	68
roll machine (except printingroll machine)			1		1		3	1	3		1		2	3	2	4	1	2	3	4	1	2		2	36
injection molding machine		1			2		5	2	4	1	2			1	1			2		1	2	1		2	27
power press			2					3	4	1			1		2	1	2	2	1	2	2	1		2	26
electric power facilities					2		2	2	1	2	1		1	1			2		3	1	2		1	2	23
felling machine																		3	3	3	1	1	4	2	17
mobile logging machine																	3	4	2	3	2	1		2	17
industrial dryer			1		1					3	2				1	2			1		1	1	1	2	16
hardening machine		4	4		8		2	7	3	4	7	3	1	3	2	3	2	2	1	4	1	4	1	1	67
mixer, grinder		2	5		5				6	2	2	6	1	2	1	3	2	3	1	4	3	4	1	1	54
printing machine		4			2		2		3	2	4	5	2	6	1	3	2	1	3	2	1	5		1	49
chain saw		4	6		4		3	1	1	4	4	3		1	1	3	4	1	1	1	3		1	1	47
inflammable substance		3	2		4		2	3	1	4		2		2	2	2			2	2		1	6	1	39
railway equipment		5			4		1	2	2	1	2			1	5	1	4	1		2	2	3	1	1	38
gas welding equipment		4	3		3		3	4	5		2	1	2			1			1	2	1	1		1	34
lathe		5	2		1		5	1		2		1			2	2		2		1	4	2	1	1	32
drill press, milling machine			3		1		3	1	5	2	2	3	1			2	1	2	1		1		1	1	30
engine		2			1		2	1		3	1	1	1	2	1	1	2	2		3	2		2	1	28
band sawing machine		5	3		1		2	2	1	2			1			1			2				1	1	22
harmful substance		1	1		3		2	2	1	1			1			1	2	1					2	1	19

