

Accident Rates for Public Works Contracts and the Construction Industry from 2015 to 2024

Year ¹	Public Works Contracts			Accident Rates					
				Fatal Accidents			Reportable Accidents		
	No. of Fatalities	No. of Non-fatal Reportable Accidents ²	No. of Man-hours Worked ³	Public Works Contracts		Construction Industry	Public Works Contracts		Construction Industry
				a ⁴	b ⁵	c ⁶	a ⁴	b ⁵	c ⁶
2015	4	287	107 550 537.8	0.004	0.13	0.20	0.27	9.7	39.1
2016	4	314	108 949 465.3	0.004	0.13	0.11	0.29	10.5	34.5
2017	6	411	124 246 121.5	0.005	0.17	0.19	0.34	12.1	32.9
2018	1	380	118 320 916.2	0.001	0.03	0.13	0.32	11.6	31.7
2019	0	189	101 275 373.5	0.000	0.00	0.16	0.19	6.7	29.0
2020	4	165	100 520 932.0	0.004	0.14	0.19	0.17	6.0	26.1
2021	3	206	108 526 771.6	0.003	0.10	0.22	0.19	6.9	29.5
2022	1	197	125 741 267.2	0.001	0.03	0.16	0.16	5.7	29.1
2023	6	232	132 582 599.3	0.005	0.16	0.17	0.18	6.4	27.6
2024	2	228	146 202 148.7	0.001	0.05	0.11	0.16	5.7	24.8

¹ The figures for 2024 are captured on 7 May 2024.

² A “non-fatal reportable accident” means industrial accident, which results in any injury that incapacity the worker for more than 3 days.

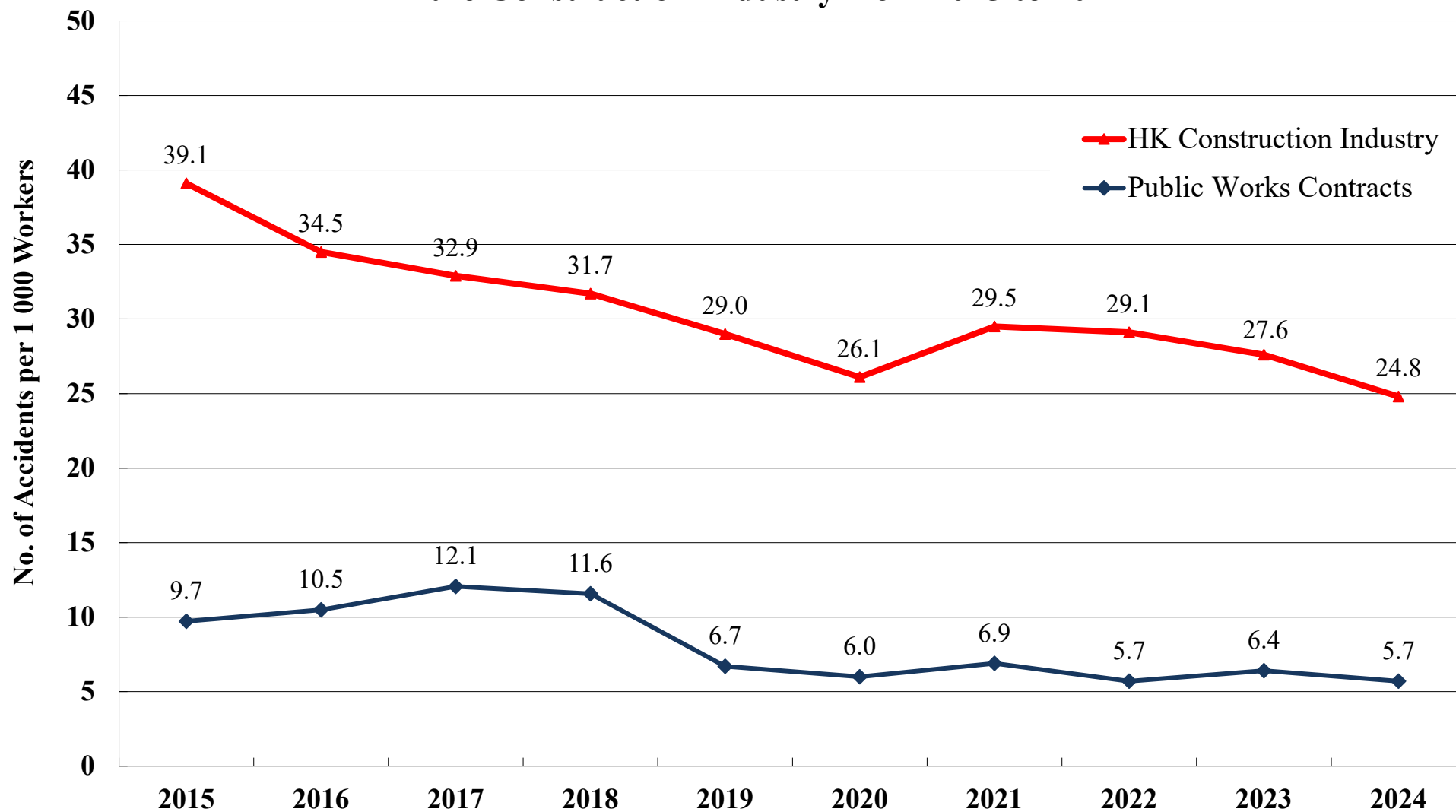
³ The “man-hours worked” means the man-hours worked by all persons employed on the works whether in the employ of main contractor and his sub-contractors who are exposed to the risks on the sites, including supervisory staff, site agent and engineer(s), workers, watchman etc.

⁴ The accident rates for columns marked with (a) are given in term of no. of accidents per 100 000 man-hours worked.

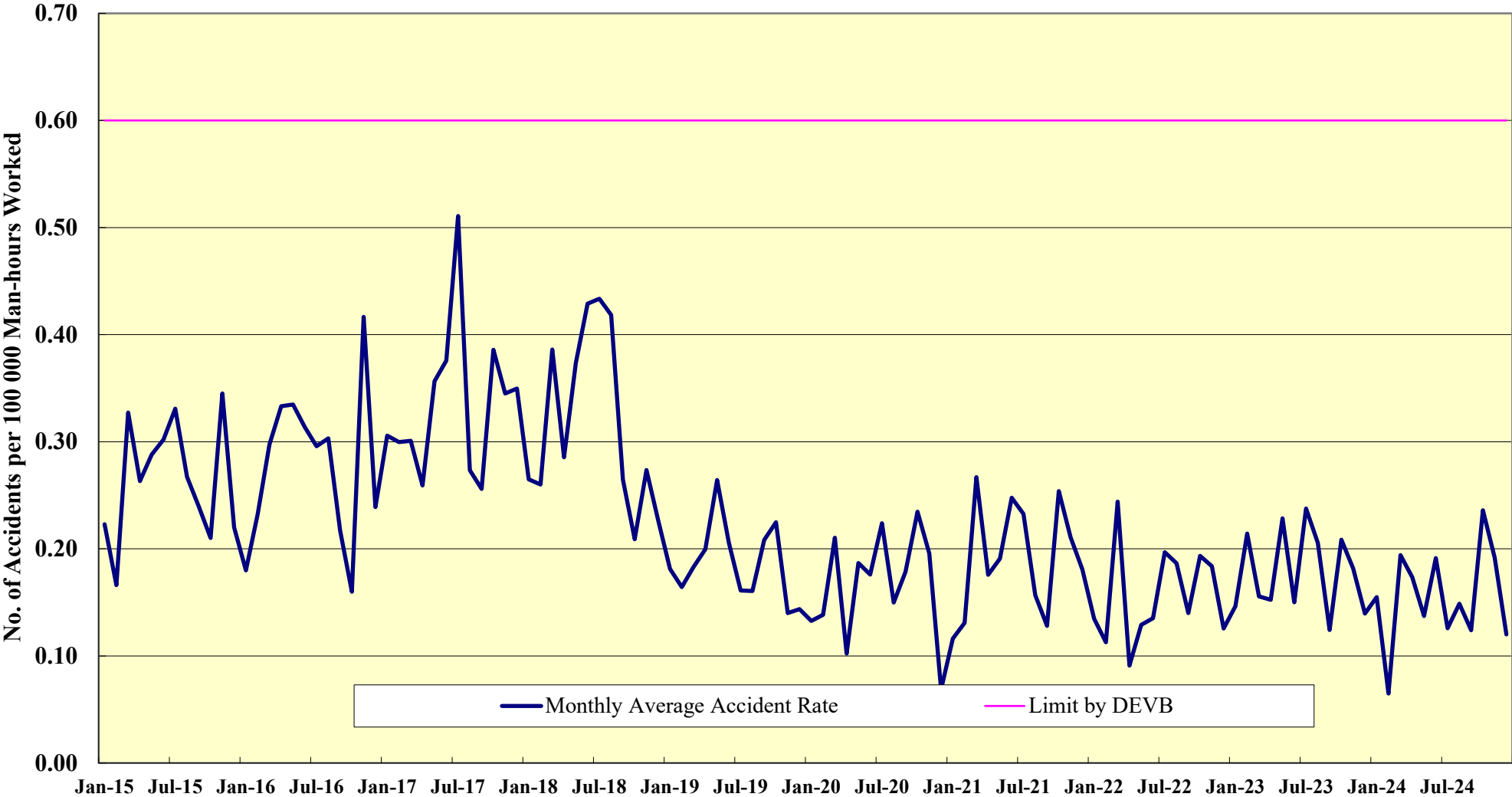
⁵ The accident rates for columns marked with (b) are given in term of no. of accidents per 1 000 workers per year based on a conversion of 1.67 accidents per 100 000 man-hours worked equivalent to 60 accidents per 1 000 workers per year.

⁶ The accident rates for columns marked with (c) are given in term of no. of accidents per 1 000 workers per year based on the statistics of the Labour Department.

Chart of Yearly Accident Rates for Public Works Contracts and the Construction Industry from 2015 to 2024



**Chart of Monthly Average Accident Rates
for Public Works Contracts from January 2015 to December 2024**



Period	1/02 - 12/02	1/03 - 3/04	4/04 - 3/05	4/05 - 1/11	since 2/11
Limit by DEVB	1.4	1.25	1.0	0.75	0.6

Number of Accidents for Public Works Contracts with Breakdown by Works Departments from 2015 to 2024

(A) Number of Fatalities

Works Department	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ArchSD	0	2	1	0	0	1	0	1	4	0
CEDD	0	0	0	1	0	2	2	0	0	0
DSD	1	0	0	0	0	0	1	0	0	2
EMSD	0	0	0	0	0	0	0	0	0	0
HyD	3	2	2	0	0	1	0	0	1	0
WSD	0	0	2	0	0	0	0	0	1	0
Total	4	4	5	1	0	4	3	1	6	2

(B) Number of Non-fatal Accidents

Works Department	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ArchSD	98	71	103	155	82	61	98	96	77	110
CEDD	32	47	64	74	41	38	52	40	34	34
DSD	20	11	16	9	8	14	12	15	17	18
EMSD	8	9	10	3	5	8	12	12	17	12
HyD	107	152	198	123	41	38	27	23	75	50
WSD	22	24	20	16	12	6	5	11	12	4
Total	287	314	411	380	189	165	206	197	232	228

**Accident Rates for Public Works Contracts
with Breakdown by Works Departments from 2015 to 2024**

Department		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ArchSD	a ¹	0.34	0.27	0.31	0.42	0.27	0.21	0.31	0.24	0.21	0.23
	b ²	12.3	9.7	11.1	15.3	9.6	7.6	11.3	8.7	7.5	8.3
CEDD	a ¹	0.20	0.16	0.27	0.30	0.18	0.16	0.20	0.13	0.10	0.09
	b ²	7.0	5.8	9.7	10.9	6.3	5.9	7.0	4.6	3.7	3.4
DSD	a ¹	0.20	0.13	0.23	0.13	0.11	0.17	0.13	0.12	0.12	0.13
	b ²	7.3	4.8	8.4	4.8	4.0	6.1	4.6	4.3	4.5	4.8
EMSD	a ¹	0.10	0.13	0.16	0.04	0.06	0.10	0.12	0.10	0.14	0.10
	b ²	3.6	4.6	5.7	1.5	2.3	3.4	4.2	3.7	5.0	3.6
HyD	a ¹	0.35	0.44	0.46	0.36	0.17	0.19	0.14	0.12	0.33	0.21
	b ²	12.6	15.7	16.5	12.8	6.2	6.8	4.9	4.2	11.8	7.7
WSD	a ¹	0.18	0.22	0.22	0.18	0.14	0.06	0.05	0.11	0.11	0.03
	b ²	6.6	7.8	8.0	6.5	5.0	2.3	1.9	3.9	3.8	1.2
All Works Departments	a ¹	0.27	0.28	0.34	0.32	0.19	0.17	0.19	0.16	0.18	0.16
	b ²	9.8	10.0	12.1	11.6	6.7	6.0	6.9	5.7	6.4	5.7
Housing Authority ^{3, 4}	b ^{3, 4}	9.2/1.5	6.8/1.5	6.9/4.2	7.4/5.7	5.2/5.3	4.5/0.3	5.2/0.7	5.7/0.0	5.2/0.7	4.8/0.7
Construction Industry ³	b ³	39.1	34.5	32.9	31.7	29.0	26.1	29.5	29.1	27.6	24.8

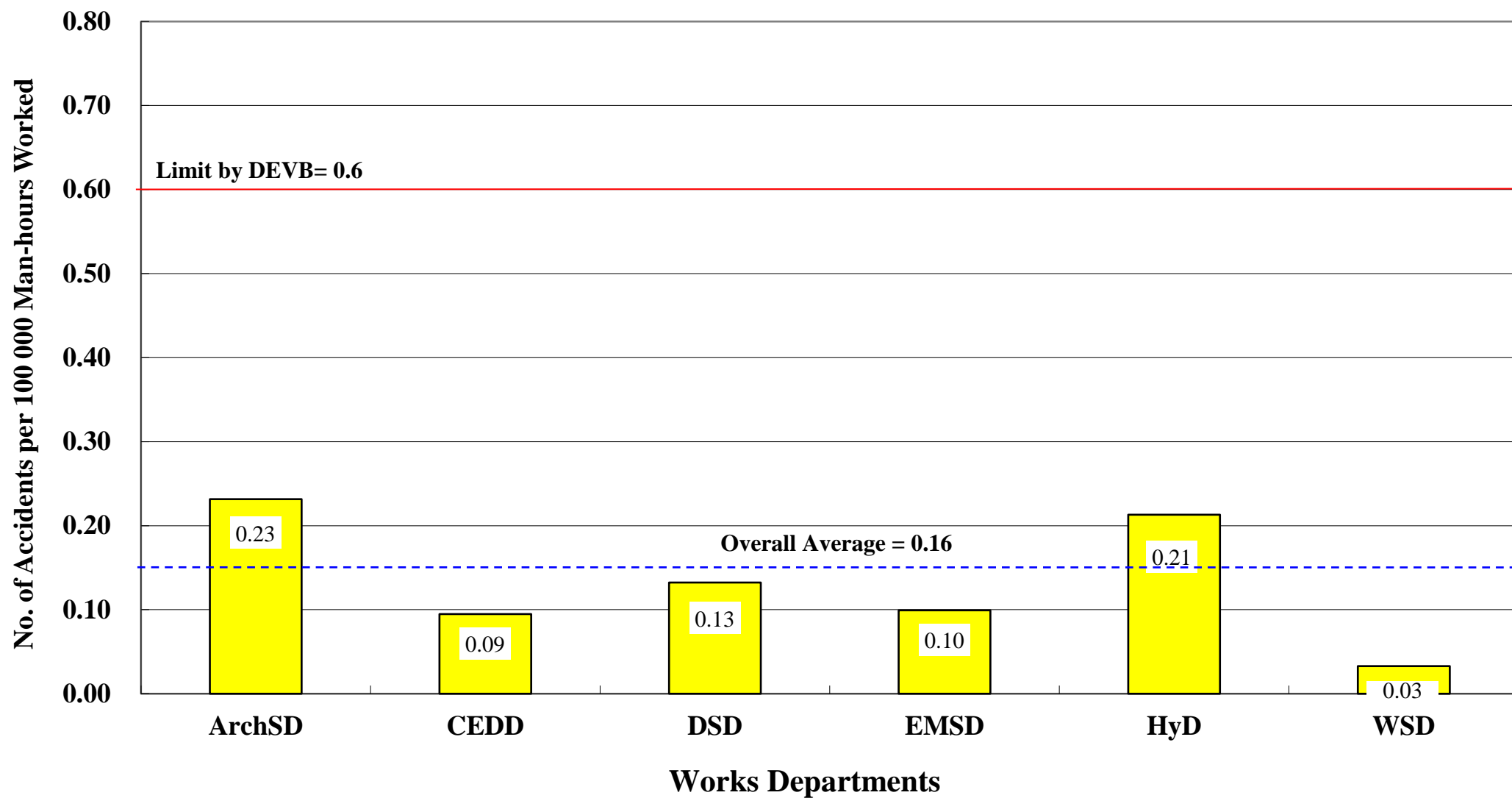
¹ The accident rates for columns marked with (a) are given in term of number of accidents per 100 000 man-hours worked.

² The accident rates for columns marked with (b) are given in term of number of accidents per 1 000 workers per year based on a conversion of 1.67 accidents per 100 000 man-hours worked equivalent to 60 accidents per 1 000 workers per year.

³ The accident rates for Housing Authority (HA) and the construction industry are given in terms of number of accidents per 1 000 workers per year.

⁴ Housing Authority has two accident rates figures (New Works / Maintenance Works).

Accident Rates for Public Works Contracts in 2024



Severity for Public Works Contracts with Breakdown by Works Department from 2020 to 2024

No. of Man-day Lost per 100 000 Man-hours Worked

Works Department	2020	2021	2022	2023	2024
ArchSD	53.3	59.6	55.9	69.8	46.5
CEDD	60.3	52.8	44.1	32.7	32.2
DSD	34.5	24.9	35.4	34.2	30.2
EMSD	11.0	18.4	14.0	16.7	9.7
HyD	52.6	49.2	37.4	56.4	67.6
WSD	24.4	14.2	20.2	34.0	25.8
All Works Departments	47.1	44.9	41.3	46.5	39.9

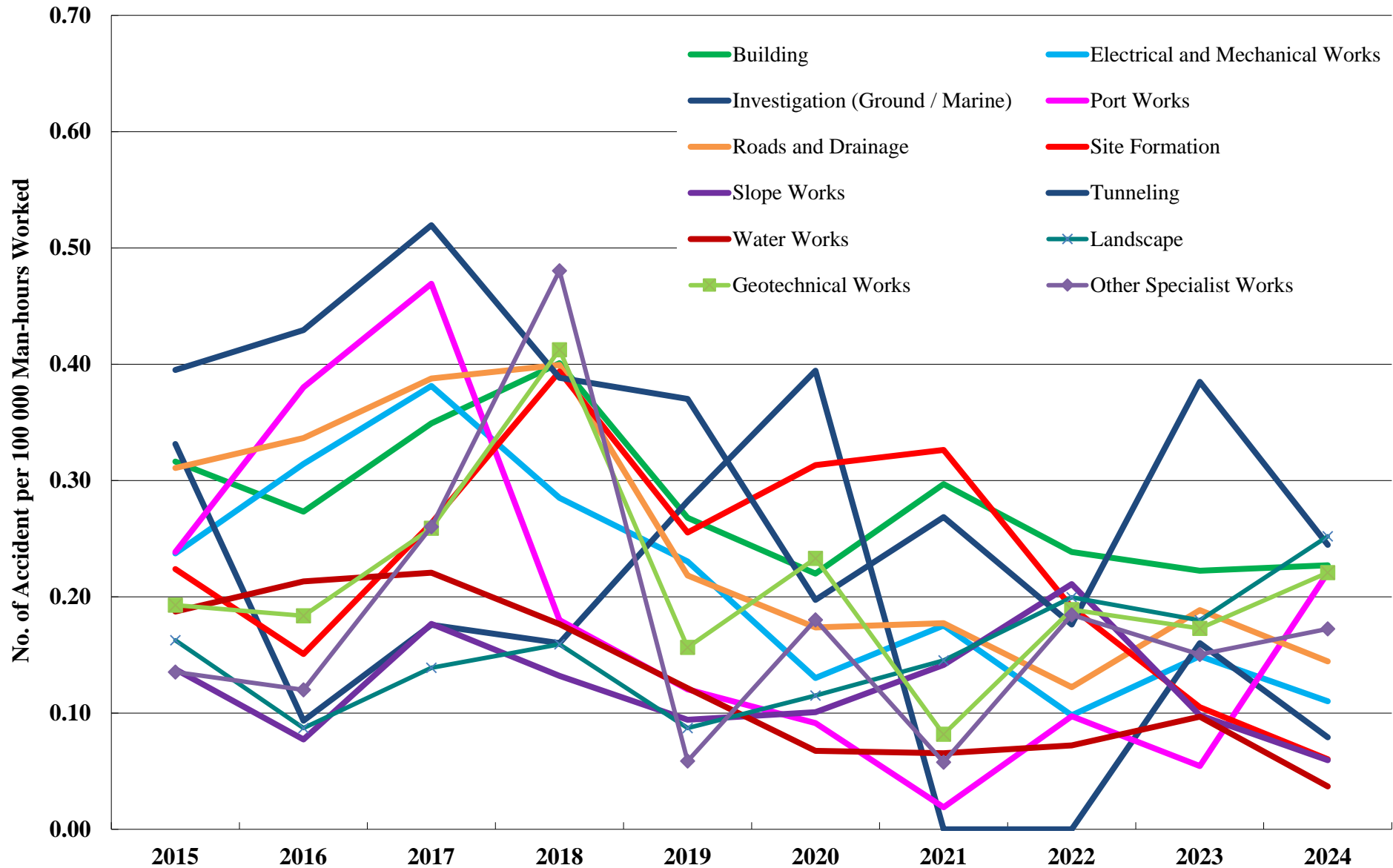
**Accident Rates for Public Works Contracts from 2015 to 2024
Analyzed by Types of Contracts**

Types of Contracts	Accident Rates (in no. of accidents per 1 000 workers per year)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Change ¹
Landscape	5.8	3.1	5.0	5.7	3.1	4.1	5.2	7.2	6.5	9.1	40.00%
Tunneling	14.2	15.4	18.7	13.9	13.3	7.1	9.6	6.3	13.8	8.8	-36.23%
Building	11.4	9.8	12.5	14.4	9.6	7.9	10.7	8.6	8.0	8.2	2.50%
Geotechnical Works	6.9	6.6	9.3	14.8	5.6	8.4	2.9	6.8	6.2	7.9	27.42%
Port Works	8.6	13.7	16.9	6.5	4.3	3.3	0.7	3.5	2.0	7.9	295.00%
Other Specialist Works	4.9	4.3	9.3	17.3	2.1	6.5	2.1	6.6	5.4	6.2	14.81%
Roads and Drainage	11.2	12.1	13.9	14.3	7.8	6.2	6.4	4.4	6.8	5.2	-23.53%
Electrical and Mechanical Works	8.5	11.3	13.7	10.2	8.3	4.7	6.3	3.5	5.3	4.0	-24.53%
Investigation (Ground / Marine)	11.9	3.4	6.3	5.8	10.1	14.2	0.0	0.0	5.8	2.8	-51.72%
Site Formation	8.0	5.4	9.5	14.1	9.2	11.2	11.7	6.9	3.8	2.2	-42.11%
Slope Works	4.9	2.8	6.3	4.7	3.4	3.6	5.1	7.6	3.5	2.1	-40.00%
Water Works	6.7	7.7	7.9	6.3	4.4	2.4	2.3	2.6	3.5	1.3	-62.86%
All Contracts	9.7	10.5	12.1	11.6	6.7	6.0	6.9	5.7	6.4	5.7	-10.94%

¹ “Change” is the percentage difference in accident rates between 2023 and 2024.

Accident Rates for Public Works Contracts Analyzed by Types of Contracts from 2015 to 2024

Appendix G
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No. of Accidents for Public Works Contracts from 2020 to 2024
Analyzed by Types of Accidents

Types of Accidents	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Slip, Trip or Fall On Same Level	39	23.08%	37	17.70%	54	27.27%	60	25.21%	60	26.09%	-
Injured Whilst Lifting or Carrying/ Manual Lifting/ Manual Handling/ Handling Without Machinery	23	13.61%	36	17.22%	25	12.63%	34	14.29%	29	12.61%	-5
Struck By Moving or Falling Object	24	14.20%	21	10.05%	31	15.66%	26	10.92%	27	11.74%	1
Striking Against Fixed or Stationary Object	9	5.33%	24	11.48%	11	5.56%	19	7.98%	22	9.57%	3
Fall of Person From Height metres	12	7.10%	25	11.96%	20	10.10%	25	10.50%	17	7.39%	-8
Hand Tool Accident	7	4.14%	9	4.31%	11	5.56%	13	5.46%	16	6.96%	3
Trapped In or Between Objects	8	4.73%	13	6.22%	15	7.58%	16	6.72%	13	5.65%	-3
Contact With Moving Machinery or Object Being Machined	3	1.78%	2	0.96%	5	2.53%	12	5.04%	9	3.91%	-3
Crushing/ Burial	2	1.18%	1	0.48%	-	-	-	-	5	2.17%	5
Striking Against Moving Object	10	5.92%	5	2.39%	5	2.53%	5	2.10%	3	1.30%	-2
Stepping On Object/ Nail	1	0.59%	2	0.96%	-	-	3	1.26%	3	1.30%	-
Machinery Operation Accident	2	1.18%	3	1.44%	1	0.51%	2	0.84%	2	0.87%	-
Exposure To or Contact With Harmful Substance (e.g. poison gas, toxic or corrosive substance)	-	-	1	0.48%	-	-	-	-	2	0.87%	2
Dust/ Foreign Particle In Eye	3	1.78%	2	0.96%	-	-	2	0.84%	1	0.43%	-1
Exposure To Fire/ Burning	1	0.59%	-	-	1	0.51%	1	0.42%	1	0.43%	-
Contact With Electricity or Electric Discharge	-	-	-	-	-	-	3	1.26%	-	-	-3
Trapped By Collapsing or Overturning Object	-	-	4	1.91%	-	-	-	-	-	-	-
Struck By Moving Vehicle/ Traffic Accident	2	1.18%	1	0.48%	-	-	-	-	-	-	-
Drowning or Asphyxiation	-	-	-	-	-	-	-	-	-	-	-
Exposure To Explosion	-	-	-	-	-	-	-	-	-	-	-
Sub-total	146	86.39%	186	89.00%	179	90.40%	221	92.86%	210	91.30%	-11
Other Types	23	13.61%	23	11.00%	19	9.60%	17	7.14%	20	8.70%	3
Total Number of Accidents	169	-	209	-	198	-	238	-	230	-	-8

¹ “Change” means the difference in the number of accidents between 2023 and 2024.

No. of Accidents for Public Works Contracts from 2020 to 2024
Analyzed by Trades of Workers

Trades of Workers	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Labourer	80	47.34%	98	46.89%	88	44.44%	101	42.44%	104	45.22%	3
Carpenter (formworker)	14	8.28%	13	6.22%	9	4.55%	28	11.76%	28	12.17%	-
Building Services/ E&M Worker	3	1.78%	10	4.78%	12	6.06%	18	7.56%	10	4.35%	-8
Bar Bender and Fixer	6	3.55%	12	5.74%	11	5.56%	8	3.36%	10	4.35%	2
Rigger/ Metal Formwork Erector	14	8.28%	5	2.39%	6	3.03%	14	5.88%	9	3.91%	-5
General Welder	2	1.18%	6	2.87%	8	4.04%	7	2.94%	6	2.61%	-1
Plumber	-	-	2	0.96%	3	1.52%	2	0.84%	6	2.61%	4
Metal Scaffolder	5	2.96%	5	2.39%	5	2.53%	2	0.84%	5	2.17%	3
Manager/ Site Engineer/ General Foreman	6	3.55%	3	1.44%	6	3.03%	6	2.52%	4	1.74%	-2
Plant & equipment Operator (hoist and crane)	-	-	1	0.48%	1	0.51%	3	1.26%	4	1.74%	1
Painter and Decorator	1	0.59%	-	-	2	1.01%	1	0.42%	3	1.30%	2
Joiner	1	0.59%	3	1.44%	1	0.51%	1	0.42%	3	1.30%	2
Concreting Labourer	-	-	-	-	-	-	1	0.42%	3	1.30%	2
Leveller	2	1.18%	-	-	1	0.51%	2	0.84%	2	0.87%	-
Plasterer	-	-	2	0.96%	1	0.51%	2	0.84%	2	0.87%	-
Excavator	-	-	2	0.96%	1	0.51%	1	0.42%	2	0.87%	1
Ganger	-	-	3	1.44%	4	2.02%	-	-	2	0.87%	2
Metal Worker	1	0.59%	9	4.31%	2	1.01%	5	2.10%	1	0.43%	-4
Truck and Other Vehicle Driver	4	2.37%	3	1.44%	1	0.51%	2	0.84%	1	0.43%	-1
Plant & equipment Operator (Piling)	-	-	-	-	2	1.01%	1	0.42%	1	0.43%	-
Plant & Equipment Operator (tunnelling)	-	-	-	-	1	0.51%	-	-	1	0.43%	1
Construction/ Mechanical Plant Mechanic or Fitter	2	1.18%	4	1.91%	2	1.01%	1	0.42%	-	-	-1
Plant & Equipment Operator (earthmoving machinery)	2	1.18%	1	0.48%	2	1.01%	1	0.42%	-	-	-1
Drainlayer/ Mainlayer	1	0.59%	-	-	1	0.51%	1	0.42%	-	-	-1
Chainman	-	-	-	-	-	-	1	0.42%	-	-	-1
Drilling Assistant	2	1.18%	-	-	-	-	1	0.42%	-	-	-1

Trades of Workers	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Plant & Equipment Operator (builders lift & other machinery)	-	-	-	-	-	-	1	0.42%	-	-	-1
Diver	-	-	-	-	-	-	1	0.42%	-	-	-1
Bamboo Scaffolder	-	-	-	-	2	1.01%	-	-	-	-	-
Concretor	1	0.59%	3	1.44%	1	0.51%	-	-	-	-	-
Bricklayer	-	-	-	-	-	-	-	-	-	-	-
Carpenter (fender)	1	0.59%	-	-	-	-	-	-	-	-	-
Demolition worker	1	0.59%	-	-	-	-	-	-	-	-	-
Pneumatic Driller	-	-	-	-	-	-	-	-	-	-	-
Structural Steel Erector	1	0.59%	-	-	-	-	-	-	-	-	-
Tunnel Worker	-	-	1	0.48%	-	-	-	-	-	-	-
Piling Operative	-	-	-	-	-	-	-	-	-	-	-
Mason	-	-	-	-	-	-	-	-	-	-	-
Sub-total	150	88.76%	186	89.00%	173	87.37%	212	89.08%	207	90.00%	-5
Other Types	19	11.24%	23	11.00%	25	12.63%	26	10.92%	23	10.00%	-3
Total Number of Accidents	169	---	209	---	198	---	238	---	230	---	-8

1 “Change” means the difference in the number of accidents between 2023 and 2024.

No. of Accidents for Public Works Contracts from 2020 to 2024
Analyzed by Natures of Injury

Natures of Injury	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Fracture	42	20.79%	71	28.51%	75	31.25%	74	26.91%	91	34.21%	17
Contusion & Bruise	60	29.70%	58	23.29%	71	29.58%	62	22.55%	47	17.67%	-15
Laceration and Cut	23	11.39%	30	12.05%	28	11.67%	33	12.00%	38	14.29%	5
Sprain/ Strain/ Twist	27	13.37%	34	13.65%	23	9.58%	35	12.73%	24	9.02%	-11
Crushing	8	3.96%	10	4.02%	6	2.50%	17	6.18%	16	6.02%	-1
Abrasion	11	5.45%	4	1.61%	8	3.33%	5	1.82%	8	3.01%	3
Amputation	2	0.99%	2	0.80%	-	-	6	2.18%	6	2.26%	-
Burn/ Scald	-	-	-	-	2	0.83%	5	1.82%	3	1.13%	-2
Dislocation	4	1.98%	5	2.01%	1	0.42%	2	0.73%	3	1.13%	1
Multiple Injuries	2	0.99%	2	0.80%	-	-	1	0.36%	3	1.13%	2
Puncture	1	0.50%	2	0.80%	1	0.42%	3	1.09%	2	0.75%	-1
Poisoning and Gassing	-	-	-	-	-	-	-	-	2	0.75%	2
Burn (heat)	5	2.48%	5	2.01%	2	0.83%	5	1.82%	1	0.38%	-4
Concussion & Other Internal Injury	2	0.99%	2	0.80%	2	0.83%	1	0.36%	1	0.38%	-
Electric Shock/ Effects of Electric Current	-	-	-	-	-	-	2	0.73%	-	-	-2
Irritation	1	0.50%	1	0.40%	1	0.42%	1	0.36%	-	-	-1
Asphyxia	-	-	-	-	-	-	-	-	-	-	-
Sub-total	188	93.07%	226	90.76%	220	91.67%	252	91.64%	245	92.11%	-7
Other Types	14	6.93%	23	9.24%	20	8.33%	23	8.36%	21	7.89%	-2
Total Sum of Nature of Injury Incurred ²	202	-----	249	-----	240	-----	275	-----	266	-----	-9
	(169)		(209)		(198)		(238)		(230)		(-8)

1 “Change” means the difference in the number of accidents between 2023 and 2024.

2 The figures were the total sum of items “Nature of Injury Incurred 1”, “Nature of Injury Incurred 2” and “Nature of Injury Incurred 3” in the Injury Report Form. “()” is the total number of accidents of that year.

No. of Accidents for Public Works Contracts from 2020 to 2024
Analyzed by Parts of Body Injured in Accidents

Parts of Body Injured	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Finger	34	16.83%	51	20.48%	40	16.67%	64	23.27%	65	24.44%	1
Back	26	12.87%	30	12.05%	30	12.50%	31	11.27%	23	8.65%	-8
Ankle	15	7.43%	7	2.81%	12	5.00%	15	5.45%	18	6.77%	3
Foot/ Toe	6	2.97%	21	8.43%	14	5.83%	14	5.09%	18	6.77%	4
Hand/ Palm	8	3.96%	9	3.61%	8	3.33%	12	4.36%	16	6.02%	4
Chest	5	2.48%	10	4.02%	7	2.92%	17	6.18%	14	5.26%	-3
Forearm	5	2.48%	5	2.01%	7	2.92%	6	2.18%	13	4.89%	7
Leg	12	5.94%	14	5.62%	22	9.17%	10	3.64%	10	3.76%	-
Skull/Scalp	7	3.47%	9	3.61%	10	4.17%	14	5.09%	9	3.38%	-5
Elbow	5	2.48%	6	2.41%	6	2.50%	7	2.55%	9	3.38%	2
Thigh	4	1.98%	4	1.61%	8	3.33%	3	1.09%	9	3.38%	6
Wrist	16	7.92%	7	2.81%	4	1.67%	12	4.36%	8	3.01%	-4
Face/ Cheek/ Chin	5	2.48%	8	3.21%	2	0.83%	9	3.27%	8	3.01%	-1
Knee	11	5.45%	7	2.81%	8	3.33%	12	4.36%	6	2.26%	-6
Shoulder	5	2.48%	10	4.02%	9	3.75%	8	2.91%	6	2.26%	-2
Neck	1	0.50%	8	3.21%	9	3.75%	6	2.18%	5	1.88%	-1
Upper Arm	2	0.99%	-	-	2	0.83%	2	0.73%	4	1.50%	2
Waist	5	2.48%	3	1.20%	6	2.50%	1	0.36%	3	1.13%	2
Eye	6	2.97%	6	2.41%	4	1.67%	2	0.73%	2	0.75%	-
Trunk	1	0.50%	-	-	2	0.83%	-	-	2	0.75%	2
Ear	-	-	1	0.40%	3	1.25%	-	-	2	0.75%	2
Pelvis/ Groin	2	0.99%	2	0.80%	4	1.67%	2	0.73%	1	0.38%	-1
Mouth/ Tooth/ Lip	4	1.98%	3	1.20%	1	0.42%	-	-	1	0.38%	1
Hip	5	2.48%	6	2.41%	5	2.08%	5	1.82%	-	-	-5
Nose	3	1.49%	3	1.20%	1	0.42%	2	0.73%	-	-	-2
Abdomen	1	0.50%	1	0.40%	2	0.83%	1	0.36%	-	-	-1
Sub-total	194	96.04%	231	92.77%	226	94.17%	255	92.73%	252	94.74%	-3
Other Types	8	3.96%	18	7.23%	14	5.83%	20	7.27%	14	5.26%	-6
Total Sum of Body Parts Injured ²	202	-----	249	-----	240	-----	275	-----	266	-----	-9
	(169)		(209)		(198)		(238)		(230)		-8

¹ “Change” means the difference in the number of accidents between 2023 and 2024.

² The figures were the total sum of items “Body parts injured 1”, “Body parts injured 2” and “Body parts injured 3” in the Injury Report Form. “()” is the total number of accidents of that year.

**No. of Accidents for Public Works Contracts from 2020 to 2024
Analyzed by Agents Involved in Accidents**

Agents Involved	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Floor, Ground, Stairs or Any Working Surface	34	18.68%	33	15.07%	44	21.57%	45	17.51%	47	19.83%	2
Material/ Product Being Handled or Stored (e.g. Plank, timber, rope etc.)	28	15.38%	49	22.37%	34	16.67%	40	15.56%	38	16.03%	-2
Portable Power or Hand Tools	19	10.44%	16	7.31%	15	7.35%	18	7.00%	25	10.55%	7
Ladder or Working At Height	11	6.04%	12	5.48%	5	2.45%	6	2.33%	11	4.64%	5
Steel Bar/ Rod	3	1.65%	6	2.74%	4	1.96%	18	7.00%	7	2.95%	-11
Other Machinery (specify)	6	3.30%	9	4.11%	11	5.39%	8	3.11%	5	2.11%	-3
Vehicle or Associated Equipment or Machinery	4	2.20%	4	1.83%	-	-	7	2.72%	5	2.11%	-2
Equipment For Lifting/ Conveying	8	4.40%	4	1.83%	4	1.96%	6	2.33%	5	2.11%	-1
Pipe	-	-	2	0.91%	-	-	3	1.17%	4	1.69%	1
Excavation/ Underground Work	1	0.55%	4	1.83%	-	-	3	1.17%	3	1.27%	-
Sewerage, Manhole or Other Confined Space	2	1.10%	5	2.28%	1	0.49%	2	0.78%	3	1.27%	1
Electricity Supply, Wiring Apparatus or Equipment	3	1.65%	1	0.46%	3	1.47%	-	-	3	1.27%	3
Construction Formwork, Shuttering & Falsework	1	0.55%	3	1.37%	-	-	6	2.33%	2	0.84%	-4
Scaffolding/ Gondola	-	-	4	1.83%	1	0.49%	3	1.17%	2	0.84%	-1
Slope	-	-	-	-	-	-	3	1.17%	2	0.84%	-1
Nail, Splinter or Chipping	-	-	-	-	1	0.49%	2	0.78%	1	0.42%	-1
Movable Container or Package of Any Kind	3	1.65%	-	-	1	0.49%	-	-	1	0.42%	1
Gas, Vapour, Dust or Fume	1	0.55%	-	-	-	-	-	-	-	-	-
Sub-total	124	68.13%	152	69.41%	124	60.78%	170	66.15%	164	69.20%	-6
Other Types	58	31.87%	67	30.59%	80	39.22%	87	33.85%	73	30.80%	-14
Total Sum of Agents Involved ²	182 (169)	-----	219 (209)	-----	204 (198)	-----	257 (238)	-----	237 (230)	-----	-20 -8

¹ “Change” means the difference in the number of accidents between 2023 and 2024.

² There were more records because multiple selection of “Agents Involved” was allowed. “()” is the total number of accidents of that year.

Appendix M

No. of Accidents for Public Works Contracts from 2020 to 2024 Analyzed by Unsafe Actions Involved in Accidents

Unsafe Actions	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Lapse Of Attention	50	26.04%	60	25.42%	67	30.45%	86	30.94%	89	33.58%	3
Adopting Unsafe Position or Posture	32	16.67%	35	14.83%	32	14.55%	44	15.83%	32	12.08%	-12
Failure To Secure Objects	15	7.81%	10	4.24%	15	6.82%	9	3.24%	17	6.42%	8
Use Unsuitable Access/ Failure To Use Access	6	3.13%	12	5.08%	9	4.09%	13	4.68%	14	5.28%	1
Use Unsafe Equipment/ Use Equipment Unsafely	14	7.29%	10	4.24%	10	4.55%	11	3.96%	10	3.77%	-1
Operating Without Authority	1	0.52%	4	1.69%	2	0.91%	3	1.08%	7	2.64%	4
Failure To Use Gloves	5	2.60%	4	1.69%	2	0.91%	4	1.44%	5	1.89%	1
Failure To Warn Others or Give Proper Signals	3	1.56%	2	0.85%	3	1.36%	4	1.44%	4	1.51%	-
Failure To Use Proper Footwear	2	1.04%	3	1.27%	2	0.91%	1	0.36%	4	1.51%	3
Unsafe Loading, Placing, Mixing etc.	4	2.08%	9	3.81%	4	1.82%	6	2.16%	3	1.13%	-3
Working On Moving or Dangerous Equipment	1	0.52%	2	0.85%	1	0.45%	3	1.08%	3	1.13%	-
Failure To Use Helmet	1	0.52%	4	1.69%	-	-	2	0.72%	2	0.75%	-
Failure To Use Safety Belt/ Harness	2	1.04%	2	0.85%	3	1.36%	1	0.36%	2	0.75%	1
Operating or Working At Unsafe Speed	-	-	-	-	-	-	3	1.08%	1	0.38%	-2
Making Safety Devices Inoperative	-	-	-	-	1	0.45%	-	-	1	0.38%	1
Failure To Use Eye Protector	1	0.52%	3	1.27%	-	-	1	0.36%	-	-	-1
Failure To use Proper Clothing	1	0.52%	1	0.42%	-	-	1	0.36%	-	-	-1
Sub-total	138	71.88%	161	68.22%	151	68.64%	192	69.06%	194	73.21%	2
Other Types	54	28.13%	75	31.78%	69	31.36%	86	30.94%	71	26.79%	-15
Total Sum of “Unsafe Actions” ²	192 (169)	-----	236 (209)	-----	220 (198)	-----	278 (238)	-----	265 (230)	-----	-13 -8

¹ “Change” means the difference in the number of accidents between 2023 and 2024.

² There were more records because multiple selection of “Unsafe Actions” was allowed. “()” is the total number of accidents of that year.

Appendix N

No. of Accidents for Public Works Contracts from 2020 to 2024 Analyzed by Unsafe Conditions Involved in Accidents

Unsafe Conditions	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Unsafe Process or Job Methods	16	8.42%	29	12.95%	23	10.22%	34	12.55%	31	11.70%	-3
Improper Procedure	18	9.47%	27	12.05%	27	12.00%	33	12.18%	30	11.32%	-3
Poor Housekeeping	11	5.79%	8	3.57%	17	7.56%	16	5.90%	20	7.55%	4
Slippery Area	12	6.32%	13	5.80%	14	6.22%	20	7.38%	18	6.79%	-2
Lack Of Warning System	3	1.58%	4	1.79%	8	3.56%	9	3.32%	12	4.53%	3
Improper Stacking/ Storage	17	8.95%	11	4.91%	10	4.44%	12	4.43%	12	4.53%	-
Inadequate Working Space/ Platform	11	5.79%	9	4.02%	11	4.89%	13	4.80%	10	3.77%	-3
Inadequate Tools and Protective Equipment	2	1.05%	2	0.89%	7	3.11%	10	3.69%	7	2.64%	-3
Defective Tool, Machinery or Material	2	1.05%	4	1.79%	6	2.67%	3	1.11%	6	2.26%	3
Improper Guarding/ No Guarding	3	1.58%	3	1.34%	7	3.11%	3	1.11%	5	1.89%	2
Improper Illumination	-	-	1	0.45%	1	0.44%	-	-	5	1.89%	5
No Protective Gear	7	3.68%	2	0.89%	1	0.44%	4	1.48%	4	1.51%	-
Improper Dress/ Footwear	1	0.53%	2	0.89%	-	-	1	0.37%	3	1.13%	2
Adverse Weather	2	1.05%	-	-	2	0.89%	1	0.37%	3	1.13%	2
Unsafe Layout Of Job, Traffic etc.	2	1.05%	1	0.45%	1	0.44%	1	0.37%	2	0.75%	1
Defective Protective Gear	1	0.53%	1	0.45%	-	-	2	0.74%	-	-	-2
Sub-total	108	56.84%	117	52.23%	135	60.00%	162	59.78%	168	63.40%	6
Other Types	82	43.16%	107	47.77%	90	40.00%	109	40.22%	97	36.60%	-12
Total Sum of Unsafe Conditions Involved ²	190 (169)	-----	224 (209)	-----	225 (198)	-----	271 (238)	-----	265 (230)	-----	-6 -8

1 “Change” means the difference in the number of accidents between 2023 and 2024.

2 There were more records because multiple selection of “Unsafe Conditions Involved” was allowed. “()” is the total number of accidents of that year.

Appendix O

No. of Accidents for Public Works Contracts from 2020 to 2024 Analyzed by Personal Factors Involved in Accidents

Personal Factors Involved	2020		2021		2022		2023		2024		
	No.	%	No.	%	No.	%	No.	%	No.	%	Change ¹
Carelessness/ Not Concentrate	96	50.53%	118	50.43%	130	58.30%	144	50.53%	161	61.22%	17
Incorrent Attitude/ Motive	23	12.11%	23	9.83%	24	10.76%	33	11.58%	27	10.27%	-6
Lack Of Knowledge or Skill	16	8.42%	22	9.40%	21	9.42%	32	11.23%	24	9.13%	-8
Unsafe Act By Another Person	17	8.95%	12	5.13%	6	2.69%	14	4.91%	6	2.28%	-8
Fatigue/ Exhaustion	1	0.53%	2	0.85%	2	0.90%	-	-	5	1.90%	5
Physical Defects	2	1.05%	1	0.43%	1	0.45%	4	1.40%	4	1.52%	-
Sub-total	155	81.58%	178	76.07%	184	82.51%	227	79.65%	227	86.31%	-
Other Types	35	18.42%	56	23.93%	39	17.49%	58	20.35%	36	13.69%	-22
Total Sum of Personal Factor Involved ²	190 (169)	-----	234 (209)	-----	223 (198)	-----	285 (238)	-----	263 (230)	-----	-22 -8

1 “Change” means the difference in the number of accidents between 2023 and 2024.

2 There are more records than the number of accidents because multiple selection of “Personal Factors Involved” was allowed. “()” is the total number of accidents of that year.