#### Accident Rates for Public Works Contracts and the Construction Industry from 2014 to 2023

		D-1-11 - W1 C	1			Acciden	t Rates		
	1	Public Works C	ontracts	I	Fatal Accident	ts	Rep	ortable Accid	lents
Year <sup>1</sup>	No. of	No. of Non-fatal	No. of Man-hours	Public Worl	ks Contracts	Construction Industry	Public Work	xs Contracts	Construction Industry
	Fatalities	Reportable Accidents <sup>2</sup>	Worked <sup>3</sup>	$a^4$	b <sup>5</sup>	$c^6$	$a^4$	b <sup>5</sup>	$c^6$
2014	5	248	107,492,392.9	0.005	0.17	0.27	0.24	8.5	41.9
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	5	411	124,246,121.5	0.004	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	108,516,777.6	0.003	0.10	0.22	0.19	6.9	29.5
2022	1	196	125,706,003.1	0.001	0.03	0.16	0.16	5.6	29.1
2023	6	227	132,470,707.3	0.005	0.16	0.17	0.18	6.3	27.6

The figures for 2023 are captured as at 27 May 2024.

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

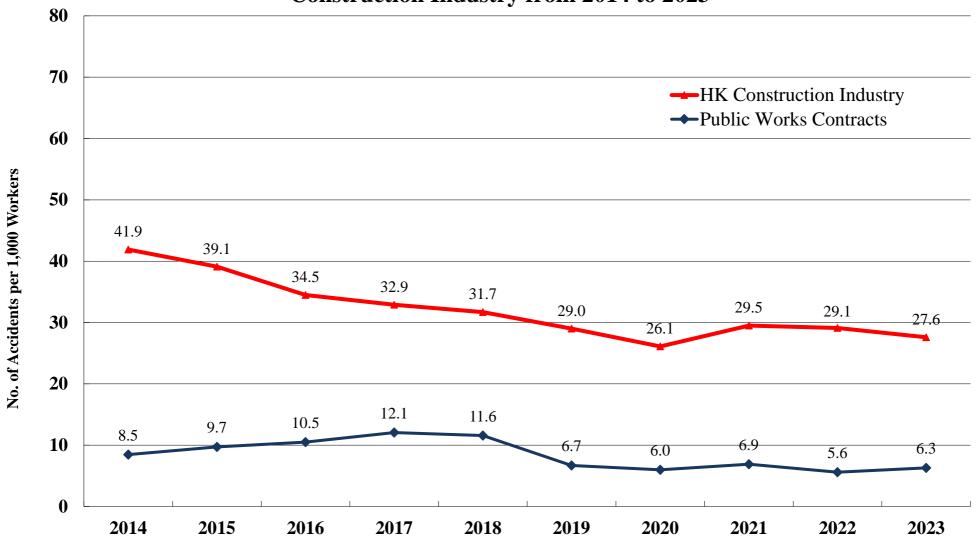
The "man-hours worked" means the man-hours worked by all persons employed on the works whether in the employ of main contractor and his sub-contractors who are exposed to the risks on the sites, including supervisory staff, site agent and engineer(s), workers, watchman etc.

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

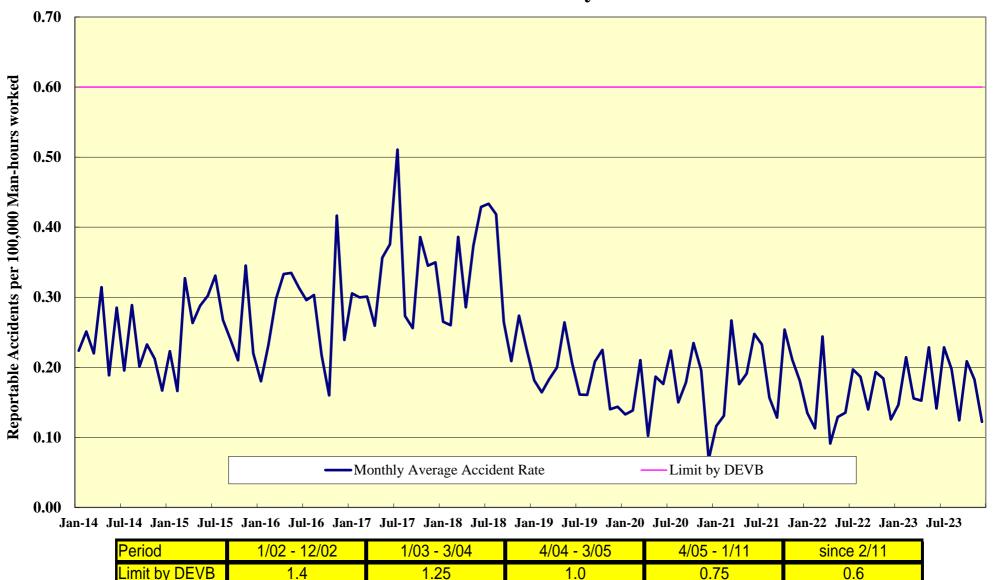
The accident rates for columns marked with (b) are given in term of no. of accidents per 1,000 workers per year based on a conversion of 1.67 accidents per 100,000 man-hours worked equivalent to 60 accidents per 1,000 workers per year.

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 2014 to 2023



# Chart of Monthly Average Accident Rates for Public Works Contracts from January 2014 to December 2023



#### Number of Accidents for Public Works Contracts with Breakdown by Works Departments from 2014 to 2023

#### (A) No. of Fatalities

Department	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ArchSD	1	0	2	1	0	0	1	0	1	4
CEDD	0	0	0	0	1	0	2	2	0	0
DSD	0	1	0	0	0	0	0	1	0	0
EMSD	0	0	0	0	0	0	0	0	0	0
HyD	4	3	2	2	0	0	1	0	0	1
WSD	0	0	0	2	0	0	0	0	0	1
Total	5	4	4	5	1	0	4	3	1	6

#### (B) No. of Non-fatal accidents

Department	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ArchSD	80	98	71	103	155	82	61	98	96	76
CEDD	30	32	47	64	74	41	38	52	39	34
DSD	20	20	11	16	9	8	14	12	15	17
EMSD	4	8	9	10	3	5	8	12	12	17
HyD	94	107	152	198	123	41	38	27	23	71
WSD	20	22	24	20	16	12	6	5	11	12
Total	248	287	314	411	380	189	165	206	196	227

#### **Accident Rates for Public Works Contracts** with Breakdown by Works Departments from 2014 to 2023

Department		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AuchCD	$a^1$	0.31	0.34	0.27	0.31	0.42	0.27	0.21	0.31	0.24	0.21
ArchSD	$b^2$	11.0	12.3	9.7	11.1	15.3	9.6	7.6	11.3	8.7	7.4
CEDD	$a^1$	0.19	0.20	0.16	0.27	0.30	0.18	0.16	0.20	0.12	0.10
CEDD	$b^2$	6.9	7.0	5.8	9.7	10.9	6.3	5.9	7.0	4.4	3.7
DCD	$a^1$	0.14	0.20	0.13	0.23	0.13	0.11	0.17	0.13	0.12	0.12
DSD	$b^2$	5.0	7.3	4.8	8.4	4.8	4.0	6.1	4.6	4.3	4.5
EMSD	$a^1$	0.06	0.10	0.13	0.16	0.04	0.06	0.10	0.12	0.10	0.14
EMSD	$b^2$	2.0	3.6	4.6	5.7	1.5	2.3	3.4	4.2	3.7	5.0
HvD	$a^1$	0.33	0.35	0.44	0.46	0.36	0.17	0.19	0.14	0.12	0.31
HyD	$b^2$	11.9	12.6	15.7	16.5	12.8	6.2	6.8	4.9	4.2	11.2
WSD	$a^1$	0.14	0.18	0.22	0.22	0.18	0.14	0.06	0.05	0.11	0.11
WSD	$b^2$	5.0	6.6	7.8	8.0	6.5	5.0	2.3	1.9	3.9	3.8
All Dept.	$a^1$	0.24	0.27	0.28	0.34	0.32	0.19	0.17	0.19	0.16	0.18
All Dept.	$b^2$	8.5	9.8	10.0	12.1	11.6	6.7	6.0	6.9	5.6	6.3
HA <sup>3, 4</sup>	b <sup>3, 4</sup>	6.4/2.2	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
Construction Industry <sup>3</sup>	$b^3$	41.9	39.1	34.5	32.9	31.7	29.0	26.1	29.5	29.1	27.6

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

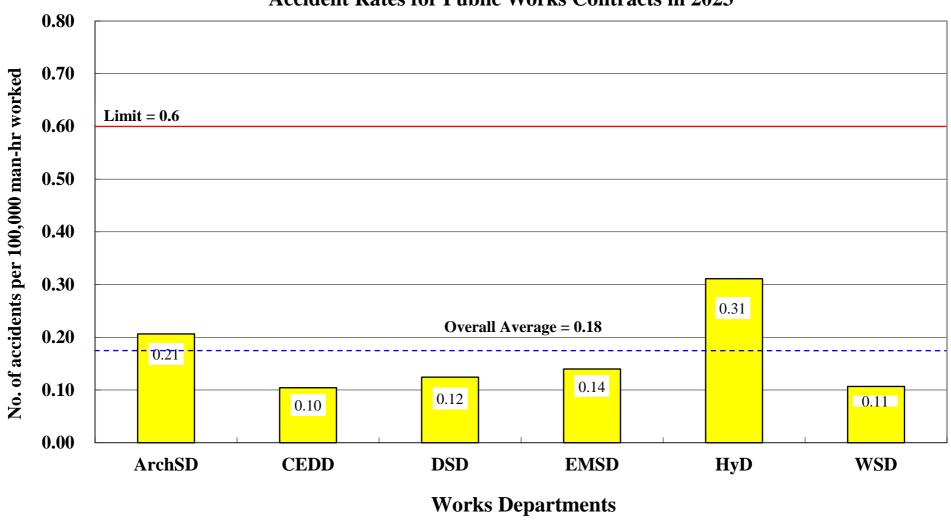
The accident rates for columns marked with (b) are given in term of no. of accidents per 1,000 workers per year based on a conversion of 1.67 accidents per 100,000 man-hours worked equivalent to 60 accidents per 1,000 workers per year.

The accident rates for Housing Authority (HA) and the construction industry are given in terms of no. of accidents per 1,000 workers per year.

<sup>3</sup> Housing Authority has two accident rates figures (New Works / Maintenance Works).

Appendix E (Page 2 of 2)

## **Accident Rates for Public Works Contracts in 2023**



Appendix F

## Severity for Public Works Contracts with Breakdown by Works Department from 2019 to 2023

## No. of Man-Day Lost per 100,000 Man-Hours Worked

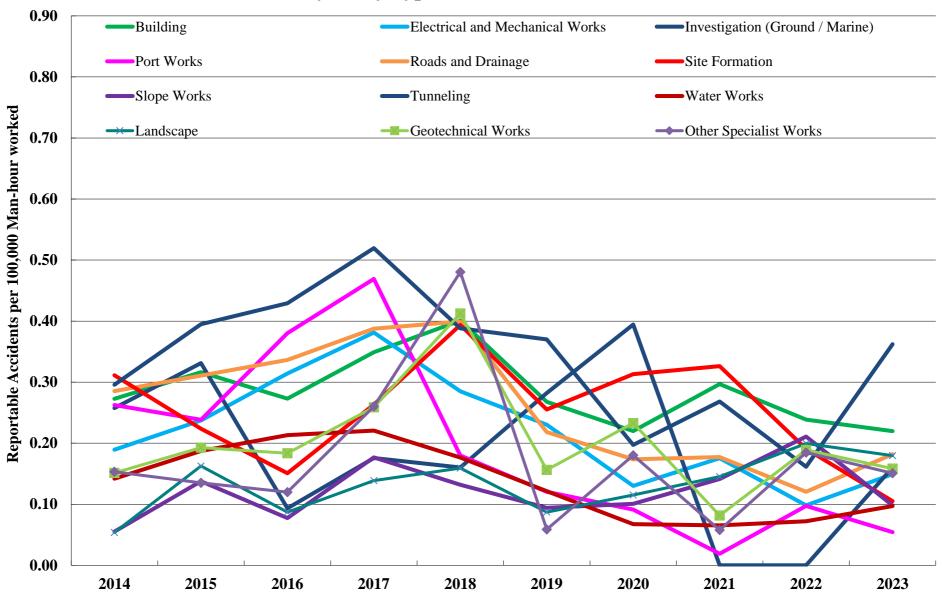
Department	2019	2020	2021	2022	2023
ArchSD	72.7	53.3	59.6	55.9	68.9
CEDD	97.6	60.3	52.8	44.1	32.6
DSD	36.1	34.5	24.9	35.4	34.1
EMSD	11.7	11.0	18.4	14.0	16.8
HyD	52.4	38.6	44.7	37.4	56.7
WSD	40.4	24.4	14.2	20.2	34.0
All Departments	63.6	44.2	44.1	41.3	46.3

#### Accident Rates for Public Works Contracts from 2014 to 2023 Analyzed by Types of Contracts

The second of the second		A	ccident	Rates (ir	no. of a	ccidents	per 1,00	00 worke	rs per ye	ear)	
Types of Contracts	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change <sup>1</sup>
Tunneling	10.6	14.2	15.4	18.7	13.9	13.3	7.1	9.6	5.8	13.0	124.1%
Building	9.8	11.4	9.8	12.5	14.4	9.6	7.9	10.7	8.6	7.9	-8.1%
Roads and Drainage	10.3	11.2	12.1	13.9	14.3	7.8	6.2	6.4	4.3	6.5	51.2%
Landscape	1.9	5.8	3.1	5.0	5.7	3.1	4.1	5.2	7.2	6.5	-9.7%
Investigation (Ground / Marine)	9.3	11.9	3.4	6.3	5.8	10.1	14.2	0.0	0.0	5.8	-
Geotechnical Works	5.4	6.9	6.6	9.3	14.8	5.6	8.4	2.9	6.8	5.7	-16.2%
Other Specialist Works	5.5	4.9	4.3	9.3	17.3	2.1	6.5	2.1	6.6	5.4	-18.2%
Electrical and Mechanical Works	6.8	8.5	11.3	13.7	10.2	8.3	4.7	6.3	3.5	5.4	54.3%
Site Formation	11.2	8.0	5.4	9.5	14.1	9.2	11.2	11.7	6.9	3.8	-44.9%
Slope Works	2.0	4.9	2.8	6.3	4.7	3.4	3.6	5.1	7.6	3.5	-53.9%
Water Works	5.1	6.7	7.7	7.9	6.3	4.4	2.4	2.3	2.6	3.5	34.6%
Port Works	9.4	8.6	13.7	16.9	6.5	4.3	3.3	0.7	3.5	2.0	-42.9%
All Contracts	8.5	9.7	10.5	12.1	11.6	6.7	6.0	6.9	5.6	6.3	12.5%

The "Change" is the percentage difference in accident rates between 2022 and 2023.

## **Accident Rates for Public Works Contracts Analyzed by Types of Contracts from 2014 to 2023**



#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Types of Accidents

Types of Assidents	20	)19	20	)20	20	021	20	)22		2023	
Types of Accidents	No.	%	Change <sup>1</sup>								
Slip, Trip or Fall On Same Level	35	18.5%	39	23.1%	37	17.7%	54	27.4%	60	25.8%	6
Injured Whilst Lifting or Carrying/ Manual Lifting/ Manual Handling/ Handling Without Machinery	29	15.3%	23	13.6%	36	17.2%	25	12.7%	33	14.2%	8
Fall of Person From Height metres	19	10.1%	13	7.7%	25	12.0%	20	10.2%	28	12.0%	8
Struck By Moving or Falling Object	18	9.5%	26	15.4%	22	10.5%	32	16.2%	27	11.6%	-5
Striking Against Fixed or Stationary Object	9	4.8%	9	5.3%	25	12.0%	11	5.6%	19	8.2%	8
Trapped In or Between Objects	11	5.8%	8	4.7%	13	6.2%	15	7.6%	16	6.9%	1
Contact With Moving Machinery or Object Being Machined	8	4.2%	3	1.8%	2	1.0%	5	2.5%	13	5.6%	8
Hand Tool Accident	21	11.1%	7	4.1%	9	4.3%	11	5.6%	11	4.7%	-
Striking Against Moving Object	5	2.6%	10	5.9%	5	2.4%	5	2.5%	5	2.1%	-
Contact With Electricity or Electric Discharge	-	-	-	-	-	-	-	-	3	1.3%	3
Stepping On Object/ Nail	1	0.5%	1	0.6%	2	1.0%	-	-	3	1.3%	3
Machinery Operation Accident	1	0.5%	2	1.2%	3	1.4%	1	0.5%	2	0.9%	1
Dust/ Foreign Particle In Eye	-	-	3	1.8%	2	1.0%	-	-	2	0.9%	2
Exposure To Fire/ Burning	-	-	1	0.6%	-	-	1	0.5%	1	0.4%	-
Exposure To or Contact With Harmful Substance (e.g. poison gas, toxic or corrosive substance)	-	-	-	-	1	0.5%	-	-	-	-	-
Trapped By Collapsing or Overturning Object	1	0.5%	-	-	4	1.9%	-	-	-	-	-
Struck By Moving Vehicle/ Traffic Accident	1	0.5%	2	1.2%	1	0.5%	-	-	-	-	-
Drowning or Asphyxiation	1	-	-	-	-	-	-	-	-	-	-
Exposure To Explosion	1	-	-	-	-	-	-	-	-	-	-
Crushing/ Burial	ı	-	2	1.2%	1	0.5%	-	-	-	-	-
Sub-total	159	84.1%	149	88.2%	188	90.0%	180	91.4%	223	95.7%	43
Other Types	30	15.9%	20	11.8%	21	10.0%	17	8.6%	10	4.3%	-7
Total number of accidents	189	-	169	-	209	-	197	-	233	-	36

<sup>1 &</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023

#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Trades of Workers

Trades of Workers	20	19	20	)20	20	)21	20	)22		2023	
Trades of Workers	No.	%	Change <sup>1</sup>								
Labourer	85	45.0%	80	47.3%	98	46.9%	88	44.7%	98	42.1%	10
Carpenter (formworker)	13	6.9%	14	8.3%	13	6.2%	9	4.6%	27	11.6%	18
Building Services/ E&M Worker	5	2.6%	3	1.8%	10	4.8%	12	6.1%	18	7.7%	6
Rigger/ Metal Formwork Erector	5	2.6%	14	8.3%	5	2.4%	6	3.0%	14	6.0%	8
Bar Bender and Fixer	2	1.1%	6	3.6%	12	5.7%	11	5.6%	8	3.4%	-3
General Welder	3	1.6%	2	1.2%	6	2.9%	8	4.1%	7	3.0%	-1
Manager/ Site Engineer/ General Foreman	7	3.7%	6	3.6%	3	1.4%	6	3.0%	6	2.6%	-
Metal Worker	2	1.1%	1	0.6%	9	4.3%	2	1.0%	5	2.1%	3
Plant & equipment Operator (hoist and crane)	4	2.1%	-	-	1	0.5%	1	0.5%	3	1.3%	2
Metal Scaffolder	3	1.6%	5	3.0%	5	2.4%	5	2.5%	2	0.9%	-3
Plumber	-	-	-	-	2	1.0%	3	1.5%	2	0.9%	-1
Leveller	1	0.5%	2	1.2%	-	-	1	0.5%	2	0.9%	1
Plasterer	2	1.1%	-	-	2	1.0%	1	0.5%	2	0.9%	1
Truck and Other Vehicle Driver	1	0.5%	4	2.4%	3	1.4%	1	0.5%	2	0.9%	1
Construction/ Mechanical Plant Mechanic or Fitter	3	1.6%	2	1.2%	4	1.9%	2	1.0%	1	0.4%	-1
Painter and Decorator	4	2.1%	1	0.6%	-	-	2	1.0%	1	0.4%	-1
Plant & Equipment Operator (earthmoving machinery)	2	1.1%	2	1.2%	1	0.5%	2	1.0%	1	0.4%	-1
Plant & equipment Operator (Piling)	1	0.5%	-	-	-	-	2	1.0%	1	0.4%	-1
Excavator	-	-	-	-	2	1.0%	1	0.5%	1	0.4%	-
Drainlayer/ Mainlayer	1	0.5%	1	0.6%	-	-	1	0.5%	1	0.4%	-
Joiner	1	0.5%	1	0.6%	3	1.4%	1	0.5%	1	0.4%	-
Chainman	-	-	-	-	-	-	-	-	1	0.4%	1
Drilling Assistant	1	0.5%	2	1.2%	-	-	-	-	1	0.4%	1
Plant & Equipment Operator (builders lift & other machinery)	-	-	-	-	-	-	-	-	1	0.4%	1
Concreting Labourer	_	-	-	-	-	-	-	-	1	0.4%	1

Tuo dos of Wouleaus	20	19	20	020	20	)21	20	022		2023	
Trades of Workers	No.	%	Change <sup>1</sup>								
Diver	-	-	-	-	-	-	-	-	1	0.4%	1
Ganger	2	1.1%	-	-	3	1.4%	4	2.0%	-	-	-4
Bamboo Scaffolder	-	-	-	-	-	-	2	1.0%	-	-	-2
Concretor	4	2.1%	1	0.6%	3	1.4%	1	0.5%	-	-	-1
Bricklayer	-	-	-	-	-	-	-	-	-	-	-
Carpenter (fender)	-	-	1	0.6%	-	-	-	-	-	-	-
Demolition worker	-	-	1	0.6%	-	-	-	-	-	-	-
Pneumatic Driller	-	-	-	-	-	-	-	-	-	-	-
Structural Steel Erector	-	-	1	0.6%	-	-	-	-	-	-	-
Tunnel Worker	1	0.5%	-	-	1	0.5%	-	-	-	-	-
Piling Operative	1	0.5%	-	-	-	-	-	-	-	-	-
Mason	1	0.5%	-	-	-	-	-	-	-	-	-
Plant & Equipment Operator (tunnelling)	-	-	-	-	-	-	1	0.5%	-	-	-1
Sub-total	155	82.0%	150	88.8%	186	89.0%	173	87.8%	208	89.3%	35
Other Types	34	18.0%	19	11.2%	23	11.0%	24	12.2%	25	10.7%	1
Total number of accidents	189		169		209		197		233		36

<sup>1 &</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023.

#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Natures of Injury

	2	2019	20	020	20	21	20	)22		2023	
Natures of Injury	No.	%	Change <sup>1</sup>								
Fracture	60	26.9%	42	20.8%	71	28.5%	75	31.4%	73	27.1%	-2
Contusion & Bruise	48	21.5%	60	29.7%	58	23.3%	71	29.7%	62	23.0%	-9
Sprain/ Strain/ Twist	39	17.5%	27	13.4%	34	13.7%	23	9.6%	34	12.6%	11
Laceration and Cut	35	15.7%	23	11.4%	30	12.0%	28	11.7%	32	11.9%	4
Crushing	6	2.7%	8	4.0%	10	4.0%	6	2.5%	16	5.9%	10
Amputation	1	0.4%	2	1.0%	2	0.8%	-	-	6	2.2%	6
Abrasion	9	4.0%	11	5.4%	4	1.6%	8	3.3%	5	1.9%	-3
Burn (heat)	3	1.3%	5	2.5%	5	2.0%	2	0.8%	5	1.9%	3
Burn/ Scald	-	-	_	-	-	-	2	0.8%	5	1.9%	3
Puncture	2	0.9%	1	0.5%	2	0.8%	1	0.4%	2	0.7%	1
Dislocation	-	-	4	2.0%	5	2.0%	1	0.4%	2	0.7%	1
Electric Shock/ Effects of Electric Current	-	-	-	-	-	-	-	-	2	0.7%	2
Concussion & Other Internal Injury	3	1.3%	2	1.0%	2	0.8%	2	0.8%	1	0.4%	-1
Irritation	-	-	1	0.5%	1	0.4%	1	0.4%	1	0.4%	-
Multiple Injuries	-	-	2	1.0%	2	0.8%	-	-	1	0.4%	1
Asphyxia	-	-	-	-	-	-	-	-	-	-	-
Sub-total	206	92.4%	188	93.1%	226	90.8%	220	92.1%	247	91.8%	27
Other Types	17	7.6%	14	6.9%	23	9.2%	19	7.9%	22	8.2%	3
Total number of accidents <sup>2</sup>	223 (189)		202 (169)		249 (209)		239 (197)		269 (233)		30 (36)

<sup>1 &</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023

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 2019 to 2023 Analyzed by Parts of Body Injured in Accidents

D ( CD ) I		2019	2	020	2	2021	2	022		2023	
Parts of Body Injured	No.	%	Change <sup>1</sup>								
Finger	45	20.2%	34	16.8%	51	20.6%	40	16.9%	62	23.0%	22
Back	24	10.8%	26	12.9%	30	12.1%	30	12.7%	30	11.2%	-
Chest	10	4.5%	5	2.5%	10	4.0%	7	3.0%	16	5.9%	9
Ankle	17	7.6%	15	7.4%	7	2.8%	12	5.1%	15	5.6%	3
Skull/Scalp	5	2.2%	7	3.5%	9	3.6%	10	4.2%	14	5.2%	4
Foot/ Toe	18	8.1%	6	3.0%	21	8.5%	14	5.9%	13	4.8%	-1
Hand/ Palm	11	4.9%	8	4.0%	9	3.6%	8	3.4%	12	4.5%	4
Wrist	5	2.2%	16	7.9%	7	2.8%	4	1.7%	12	4.5%	8
Knee	7	3.1%	11	5.4%	7	2.8%	8	3.4%	12	4.5%	4
Leg	12	5.4%	12	5.9%	14	5.6%	22	9.3%	10	3.7%	-12
Face/ Cheek/ Chin	10	4.5%	5	2.5%	8	3.2%	2	0.8%	9	3.3%	7
Shoulder	10	4.5%	5	2.5%	10	4.0%	9	3.8%	8	3.0%	-1
Elbow	1	0.4%	5	2.5%	6	2.4%	6	2.5%	7	2.6%	1
Neck	6	2.7%	1	0.5%	8	3.2%	9	3.8%	6	2.2%	-3
Forearm	8	3.6%	5	2.5%	5	2.0%	7	3.0%	6	2.2%	-1
Hip	5	2.2%	5	2.5%	6	2.4%	5	2.1%	5	1.9%	_
Thigh	4	1.8%	4	2.0%	4	1.6%	8	3.4%	3	1.1%	-5
Eye	1	0.4%	6	3.0%	6	2.4%	4	1.7%	2	0.7%	-2
Nose	-	-	3	1.5%	3	1.2%	1	0.4%	2	0.7%	1
Pelvis/ Groin	-	-	2	1.0%	2	0.8%	4	1.7%	2	0.7%	-2
Upper Arm	6	2.7%	2	1.0%	-	-	2	0.8%	2	0.7%	-
Abdomen	-	-	1	0.5%	1	0.4%	2	0.8%	1	0.4%	-1
Waist	2	0.9%	5	2.5%	3	1.2%	6	2.5%	1	0.4%	-5
Trunk	-	-	1	0.5%	-	-	2	0.8%	-	-	-2
Mouth/ Tooth/ Lip	-	-	4	2.0%	3	1.2%	1	0.4%	-	-	-1
Ear	1	0.4%	-	-	1	0.4%	3	1.3%	-	-	-3
Sub-total	208	93.3%	194	96.0%	231	93.1%	226	95.8%	250	92.9%	24
Other Types	15	6.7%	8	4.0%	18	7.3%	13	5.5%	19	7.1%	6
Total number of accidents <sup>2</sup>	223 (189)		202 (169)		248 (209)		236 (197)		269 (233)		33 (36)

<sup>&</sup>lt;sup>1</sup> "Change" means the difference in no. of accidents between 2022 and 2023.

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 2019 to 2023 Analyzed by Agents Involved in Accidents

	20	)19	2	020	2	021	2	022		2023	
Agents Involved	No.	%	Change <sup>1</sup>								
Floor, Ground, Stairs or Any Working Surface	39	20.2%	34	18.7%	33	15.1%	44	21.7%	45	17.9%	1
Material/ Product Being Handled or Stored (e.g. Plank, timber, rope etc.)	25	13.0%	28	15.4%	49	22.4%	34	16.7%	38	15.1%	4
Steel Bar/ Rod	1	0.5%	3	1.6%	6	2.7%	4	2.0%	18	7.2%	14
Portable Power or Hand Tools	27	14.0%	19	10.4%	16	7.3%	15	7.4%	16	6.4%	1
Other Machinery (specify)	5	2.6%	6	3.3%	9	4.1%	11	5.4%	8	3.2%	-3
Vehicle or Associated Equipment or Machinery	6	3.1%	4	2.2%	4	1.8%	-	-	7	2.8%	7
Ladder or Working At Height	4	2.1%	11	6.0%	12	5.5%	5	2.5%	6	2.4%	1
Equipment For Lifting/ Conveying	6	3.1%	8	4.4%	4	1.8%	4	2.0%	6	2.4%	2
Construction Formwork, Shuttering & Damp; Falsework	2	1.0%	1	0.5%	3	1.4%	-	-	6	2.4%	6
Scaffolding/ Gondola	-	-	-	-	4	1.8%	1	0.5%	3	1.2%	2
Excavation/ Underground Work	2	1.0%	1	0.5%	4	1.8%	_	-	3	1.2%	3
Slope	3	1.6%	-	-	-	-	_	-	3	1.2%	3
Pipe	3	1.6%	-	-	2	0.9%	-	-	3	1.2%	3
Nail, Splinter or Chipping	-	-	-	-	-	-	1	0.5%	2	0.8%	1
Sewerage, Manhole or Other Confined Space	1	0.5%	2	1.1%	5	2.3%	1	0.5%	2	0.8%	1
Movable Container or Package of Any Kind	-	-	3	1.6%	-	-	1	0.5%	-	-	-1
Gas, Vapour, Dust or Fume	-	-	1	0.5%	-	-	-	-	-	-	-
Electricity Supply, Wiring Apparatus or Equipment	1	0.5%	3	1.6%	1	0.5%	3	1.5%	1	-	-3
Sub-total	125	64.8%	124	68.1%	152	69.4%	124	61.1%	166	66.1%	42
Other Types	68	35.2%	58	31.9%	67	30.6%	79	38.9%	85	33.9%	6
Total number of accidents <sup>2</sup>	193 (189)		182 (169)		219 (209)		203 (197)		251 (233)		48 (36)

<sup>&</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023

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

#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Unsafe Actions Involved in Accidents

TI 6 A 4	2019		2020		2021		2022		2023		
Unsafe Actions	No.	%	Change <sup>1</sup>								
Lapse Of Attention	65	31.4%	50	26.0%	60	25.4%	67	30.6%	82	30.4%	15
Adopting Unsafe Position or Posture	31	15.0%	32	16.7%	35	14.8%	32	14.6%	43	15.9%	11
Use Unsuitable Access/ Failure To Use Access	7	3.4%	6	3.1%	12	5.1%	9	4.1%	13	4.8%	4
Use Unsafe Equipment/ Use Equipment Unsafely	9	4.3%	14	7.3%	10	4.2%	10	4.6%	11	4.1%	1
Failure To Secure Objects	15	7.2%	15	7.8%	10	4.2%	15	6.8%	9	3.3%	-6
Unsafe Loading, Placing, Mixing etc.	3	1.4%	4	2.1%	9	3.8%	4	1.8%	6	2.2%	2
Failure To Warn Others or Give Proper Signals	2	1.0%	3	1.6%	2	0.8%	3	1.4%	4	1.5%	1
Failure To Use Gloves	3	1.4%	5	2.6%	4	1.7%	2	0.9%	4	1.5%	2
Operating Without Authority	2	1.0%	1	0.5%	4	1.7%	2	0.9%	3	1.1%	1
Working On Moving or Dangerous Equipment	-	-	1	0.5%	2	0.8%	1	0.5%	3	1.1%	2
Operating or Working At Unsafe Speed	-	-	-	-	-	-	-	-	3	1.1%	3
Failure To Use Helmet	-	-	1	0.5%	4	1.7%	-	-	2	0.7%	2
Failure To Use Safety Belt/ Harness	1	0.5%	2	1.0%	2	0.8%	3	1.4%	1	0.4%	-2
Failure To Use Proper Footwear	3	1.4%	2	1.0%	3	1.3%	2	0.9%	1	0.4%	-1
Failure To Use Eye Protector	-	-	1	0.5%	3	1.3%	-	-	1	0.4%	1
Failure To use Proper Clothing	-	-	1	0.5%	1	0.4%	-	-	1	0.4%	1
Making Safety Devices Inoperative	-	-	-	-	-	-	1	0.5%	_	-	-1
Sub-total	141	68.1%	138	71.9%	161	68.2%	151	68.9%	187	69.3%	36
Other Types	66	31.9%	54	28.1%	75	31.8%	68	31.1%	83	30.7%	15
Total sum of "Unsafe Actions" <sup>2</sup>	207 (189)		192 (169)		236 (209)		219 (197)		270 (233)		51 (36)

<sup>&</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023

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

#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Unsafe Conditions Involved in Accidents

Unsafe Conditions	2019		2020		2021		2022		2023		
	No.	%	Change <sup>1</sup>								
Unsafe Process or Job Methods	26	12.8%	16	8.4%	29	12.9%	23	10.3%	34	12.8%	11
Improper Procedure	16	7.9%	18	9.5%	27	12.1%	27	12.1%	32	12.1%	5
Slippery Area	9	4.4%	12	6.3%	13	5.8%	14	6.3%	20	7.5%	6
Poor Housekeeping	9	4.4%	11	5.8%	8	3.6%	17	7.6%	16	6.0%	-1
Inadequate Working Space/ Platform	6	3.0%	11	5.8%	9	4.0%	11	4.9%	12	4.5%	1
Improper Stacking/ Storage	8	3.9%	17	8.9%	11	4.9%	10	4.5%	11	4.2%	1
Inadequate Tools and Protective Equipment	4	2.0%	2	1.1%	2	0.9%	7	3.1%	10	3.8%	3
Lack Of Warning System	6	3.0%	3	1.6%	4	1.8%	8	3.6%	9	3.4%	1
No Protective Gear	-	-	7	3.7%	2	0.9%	1	0.4%	4	1.5%	3
Improper Guarding/ No Guarding	2	1.0%	3	1.6%	3	1.3%	7	3.1%	3	1.1%	-4
Defective Tool, Machinery or Material	6	3.0%	2	1.1%	4	1.8%	6	2.7%	3	1.1%	-3
Defective Protective Gear	1	0.5%	1	0.5%	1	0.4%	-	-	2	0.8%	2
Adverse Weather	1	0.5%	2	1.1%	-	-	2	0.9%	1	0.4%	-1
Unsafe Layout Of Job, Traffic etc.	-	-	2	1.1%	1	0.4%	1	0.4%	1	0.4%	-
Improper Dress/ Footwear	2	1.0%	1	0.5%	2	0.9%	-	-	1	0.4%	1
Improper Illumination	-	-	-	-	1	0.4%	1	0.4%	-	-	-1
Sub-total	96	47.3%	108	56.8%	117	52.2%	135	60.3%	159	60.0%	24
Other Types	107	52.7%	82	43.2%	107	47.8%	89	39.7%	106	40.0%	17
Total number of accidents <sup>2</sup>	203 (189)		190 (169)		224 (209)		224 (197)		265 (233)		41 (36)

<sup>1 &</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023.

<sup>2</sup> There were more records because multiple selection of "Unsafe Conditions Involved" was allowed. "()" is the total number of accidents of that year.

#### No. of Accidents for Public Works Contracts from 2019 to 2023 Analyzed by Personal Factors Involved in Accidents

Personal Factors Involved	2019		2020		2021		2022		2023		
	No.	%	Change <sup>1</sup>								
Carelessness/ Not Concentrate	119	55.9%	96	50.5%	118	51.5%	130	58.6%	142	51.4%	12
Incorrect Attitude/ Motive	24	11.3%	23	12.1%	23	10.0%	24	10.8%	32	11.6%	8
Lack Of Knowledge or Skill	22	10.3%	16	8.4%	22	9.6%	21	9.5%	30	10.9%	9
Unsafe Act By Another Person	3	1.4%	17	8.9%	12	5.2%	6	2.7%	14	5.1%	8
Physical Defects	3	1.4%	2	1.1%	1	0.4%	1	0.5%	4	1.4%	3
Fatigue/ Exhaustion	2	0.9%	1	0.5%	2	0.9%	2	0.9%	-	-	-2
Sub-total	173	81.2%	155	81.6%	178	76.1%	184	82.9%	222	80.4%	38
Other Types	40	18.8%	35	18.4%	56	23.9%	38	17.1%	54	19.6%	16
Total number of accidents <sup>2</sup>	213 (189)		190 (169)		234 (209)		222 (197)		276 (233)		54 (36)

<sup>1 &</sup>quot;Change" means the difference in no. of accidents between 2022 and 2023.

<sup>2</sup> There are more records than the number of accidents because multiple selection of "Person Factors Involved" was allowed. "()" is the total number of accidents of that year.